INTN'L MONTHLY MAGAZINE BY AND FOR ACTIVE RADIOAMATEURS

RADIOSPORTING

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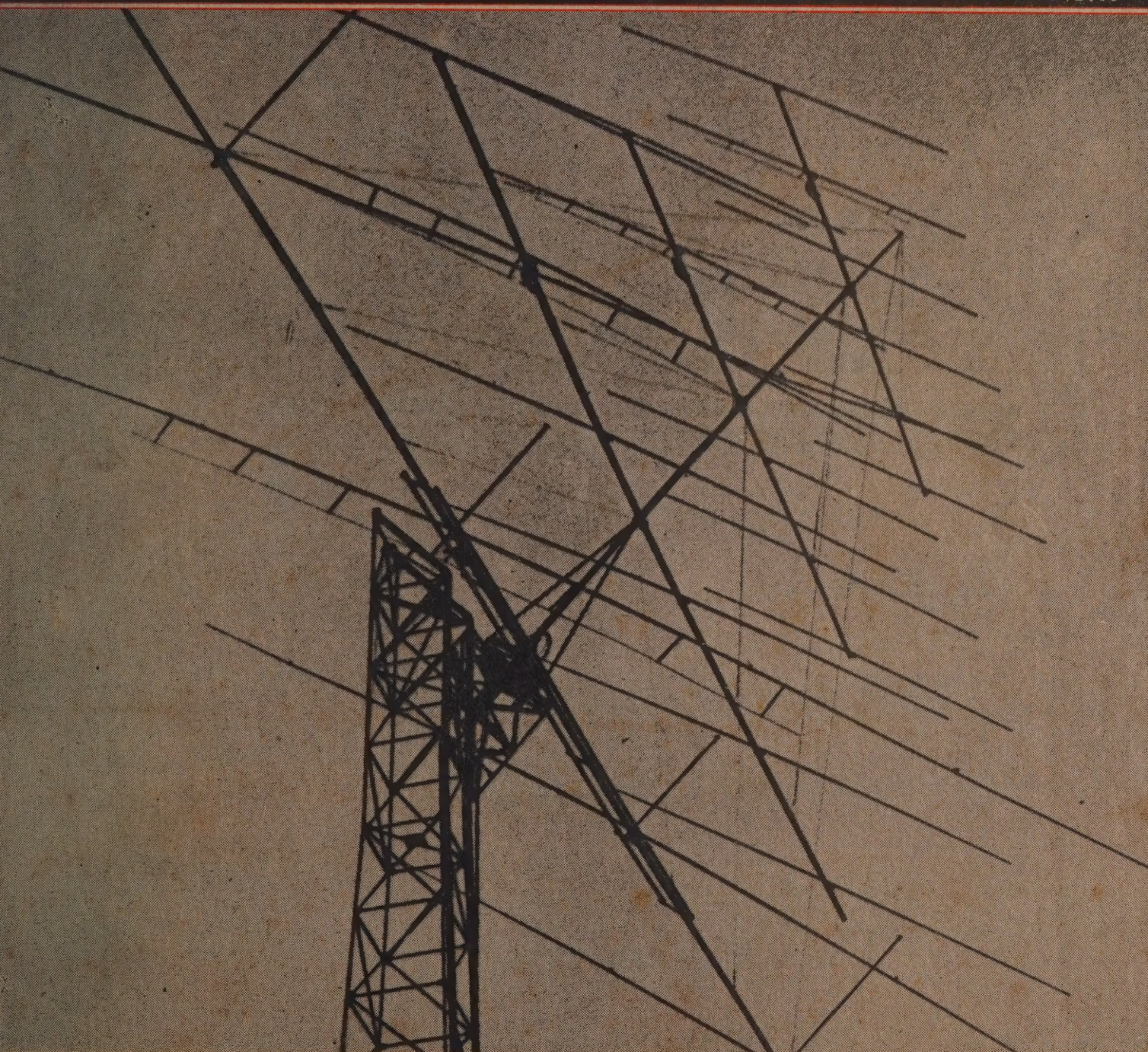

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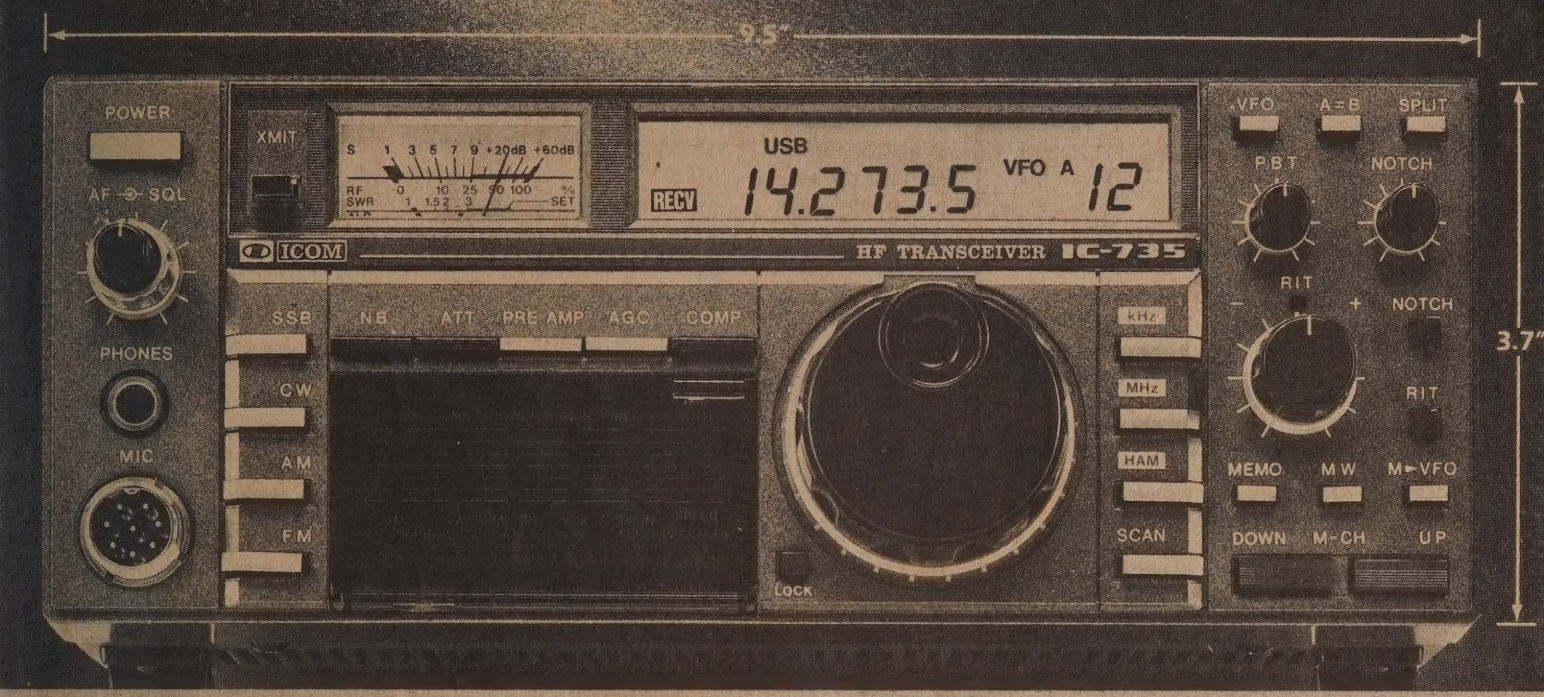

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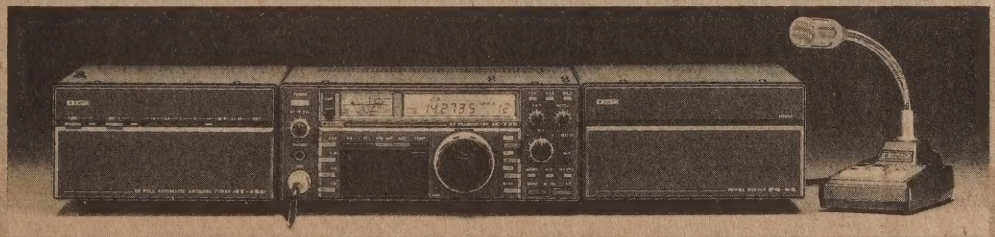

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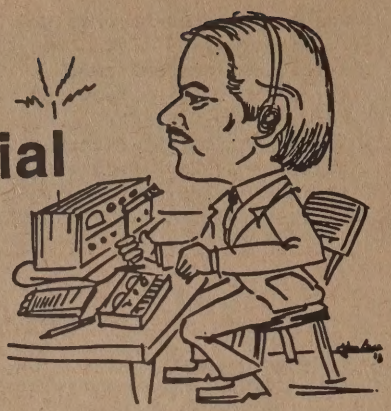
VE3BMV Radiotorial



Here it is, the main month for contesters (phone types) - October. The biggest one of them all is the CQ WW DX Contest. Time to shake the bugs out of the radios, get the water out of the coax, fix the rusty antennas and get in shape for the marathon of working the world in 48 hours.

Behind each entry in the contest there is a story. All kinds of stories, funny, sad, but mostly the story of hard work and preparation. Our radio athletes push themselves to the point when they start losing control over their senses due to exhaustion. There are very few sports that can compare with radio contesting. The successful contester has to acquire operating skills by doing it. This means a lot of operating and practice. A contester has to study, experiment and build an xantenna farm. A contester has to know and observe the propagation and use it to look for those rare openings. A contester knows his equipment and often makes it better than when it left the factory. A contester that integrates best of all those things that are involved, usually gets to the top of the hill. There is a lot behind that simple listing of the callsign in the contest results. Sometimes, when all is just right and better than the competitors, we come out on top. Sometimes all this preparation and hard work gets wiped out by a storm, equipment or power failure, propagation or even XYL. This never appears in the result listings. We never know if all was just right or plagued with problems or whether Murphy visited.

Each contest entry is a learning experience. Even the old contest tiger who has a number of records on his credit always finds something new and educational. In the next contest this will be used and the scores should go up, and perhaps the new record set. Many top contesters have discovered things that our professional and commercial colleagues don't know much about. Some keep it to themselves or just talk to their club colleagues. Some will publish it later on (when the new, better weapon is found) and get the credit and appreciation of the wide contest fraternity.

It is often a tricky situation. Should we let the "secrets" out? I think we should. Maybe not right away. Maybe when we have another, new "secret weapon," or a few years go by. There are many contesters and DXers who will appreciate knowing the trick and will be eternally grateful and who will give a contester an extra point when they hear him in the contest calling CQ with no takers. Have you got any old "secrets" in the closet? Let's hear about them! Send us your story behind the callsign and get the thanks and admiration from the rest of the radio souls.

There will be some "secrets" coming out of the 'BMV kitchen. I believe that some of them will be quite new and surprising to many. I am at the stage where I have done my best from the 46x120 foot city lot and it's time to "upgrade" the QTH and move out into the country where there is more room and no power line noise and TV neighbors. The experience gained so far will be applied to design a new generation of antenna systems and to take advantage of the propagation phenomena observed. I am looking forward to it and already looking for the place in W2 land (of all places) to keep XYL and radio happy. In the mean time I am just hoping to find the time to put up that two or three element quad for 80 meters in time for the contest season.

Also, I am trying to manage the tremendous workload that keeps hovering over me with professional work and the magazine. The first one has to be taken care of, for it keeps the family alive and pays for the magazine. The second one is a labor of love and I feel bad about not being able to devote as much time and resources to it as I would like. There is so much to do, to write, but the reality forces me to stay sane and keep balance between the work, family and magazine. We are gradually taking the steps to balance it all out and spend more time on the magazine. Only those who ever edited or produced a newsletter or a magazine know what it takes. It is a pain (mostly in the neck and fingers) to produce the paper, but it feels like a million points when the things is done and printed. One thing I have found, even the CQ WW contest marathon feels like a chicken feed compared to producing one issue of the magazine.

As you see with this issue, we are changing the format (mainly paper and printer). We should also improve our delivery time. We have a few things ready to be used, like a TYP-SET program to produce the titles, Word Perfect to produce the proportional spacing and right justified, but... The time and "little" problems keep hanging around. Like: TYP-SET works on "most" plotters - except the one we have; Word Perfect has many printers on its menu but not our Fujitsu Daisywriter Matrix 24. This printer is so good and new that manuals and font cartridges are just starting to appear. Maybe next month.

It will be renewal time for many who started their subscription early. An explanation of the code on the mailing label is in order. If your label says 8510, it means that the last issue you will receive is November 1985. It was meant to be October, but we had the "problem" with naming our issues. We were out of sync with rest of the magazines. As it is now, the 8510 means that issue is produced and mailed in October 1985 and bears the November label. So if you are getting close to your last issue, please renew in time. It is a pain to mail the back issues.

Thank you all for your subscriptions to Radiosporting and for your continuing support. We hope you enjoy it and we will work even harder to make it better with a higher quality of reading. We also thank you for including the copy or two of our complimentary mailings in your subscription. It helps to carry the financial burden.

Among the people who discovered Radiosporting is Ken "Judge" Glanzer, K7GCO. Ken was so pleased when he came across our magazine that he phoned and offered to contribute to our antenna department. Many old-timers know Ken as Mr. Inverted Vee and for his many antenna articles, book, and practical approach to antenna design. We welcome Ken aboard and are looking forward to his articles! 73, Yuri

USA - JAPAN AGREEMENT

A RECIPROCAL OPERATING AGREEMENT was concluded between the United States and Japan on August 8. According to stories credited to the Tokyo - based English language newspaper Japan Times and several other domestic Japanese language newspapers, the agreement will permit all license holders regardless of license class, to operate in either nation under reciprocal permit. Included in the agreement are the several million Japanese "no code" amateurs, which the newpapers say will have complete US operating privileges on all frequencies above 30 MHz. With Japanese tourism to the United States at an all time high, the number of Japanese hams expected to take advantage of the new privileges is expected to be massive, especially on two meter FM along the West Coast. The FCC reports that the new reciprocal agreement goes into effect September 8th. (Westlink Report)

K7UGA ON NO CODE LICENSE

THE NO-CODE AMATEUR LICENSE is far from a dead issue in the mind of America's leading radio amateur. During a recent videotaped interview, US Senator Barry M. Goldwater, K7UGA, indicated that he felt the idea of a no-code license should be reconsidered. Goldwater made the statement in answer to a question from NBC newsman Roy Neal, K6DUE. Neal had asked Senator Goldwater what he saw as the thrill of amateur radio, and if any "open door" existed to entice newcomers to the service. To this, the senator responded, "Well, I hate to say this because I am basically opposed to it, but I think we are going to have to take a harder look at the no-code licensing -- not across (all) the bands, but in some isolated section of the spectrum for those people who will not get into amateur radio because they do not want to learn the code. They would become, I think, interested (in CW operation) after they came in and had a permit to operate on a very limited area of the bands on voice. They would turn to CW, I would hope, because I would hate to ever think of CW getting out of amateur radio. But, it's out of everything else. We don't even teach it in the Air Force anymore." When asked if we have permitted today's technology to "run away from us" or if ways exist to circumvent this, Senator Goldwater replied, "In communications, we are just beginning...Five years from now, what you and I are talking about will be passed. It won't be used anymore. Communications is the fastest moving and fastest advancing science we have, and getting back to the base of your question: do I think that young people or old people will be willing to try and work out a circuit with modern solid state equipment? I have my doubts, to be honest with you. As long as there are companies making kits...there will be people making (building) amateur gear. But even they are bailing out of it."

The senator admitted that he would be hard put to try and construct a modern high-tech piece of solid state ham gear, adding that he felt, "We have to recognize that the day of store bought equipment is here!"

The ten minute interview with Senator Goldwater was videotaped aboard the "Queen Mary" Hotel/ocean liner in Long Beach, California during the recent ARRL Southwestern Division Convention. Goldwater was the banquet speaker and Neal was emcee.

Exact plans for the release of the entire interview are unknown, though a portion of it may be included in the upcoming ARRL Ham in Space documentary, "SAREX."

The technical aspect of the interview was made possible by Dave Bell (W6AQ), who donated the use of his television equipment, and KTTV cameraman engineer Mert Garlick (N6AWE), who manned it.

(Westlink Report)

K3TG SILENT KEY

TOM GABBERT, K3TG, who was the chief of the International Nuclear Affairs Division of the Arms Control and Disarmament Agency, died of respiratory failure at his home in Washington on July 28. Tom was a member of the First Class CW Operators Club and several other amateur organizations. An avid DXer, he was active during the 1970's from his Austrian station OE1ZGA and more recently from 4U1VIC, a station he helped to establish.(Westlink)

WØORE SPEAKER AT OCTOBERVENTION

ASTRONAUT TONY ENGLAND, WOORE, will be the guest of honor and main banquet speaker at the ARRL Pacific Division convention, called the "Octobervention," to be held November 1-2, 1985, at the Hacienda Hotel in Las Vegas, Nevada. An invitation has also been extended to astronaut John David Bartoe (W4NYZ), to attend, and word is expected soon as to whether he will be able to accept the offer. It is hoped that astronaut England will be able to bring video tapes of the uplinked SSTV received aboard the shuttle for viewing at the convention. (Westlink Report)

AMATEUR ASTRONOMERS

The Independent Space Research Group, which is developing an amateur space telescope to be placed into earth orbit, is in the process of developing a list of hams interested in taking part in the project. If you are interested, contact James Morris, N4LJX, 2233 Sanford Avenue, SW, Roanoke, VA 24014. (Westlink Report)

ACSB DEMONSTRATION

"The Capability of ACSB" was the name of a program presented at the July 20 meeting of the 220 Spectrum Management Association of Southern California and took most attendees by surprise.

Most had heard about amplitude compandored sideband, but a demonstration and talk by Jim Hendershot, WA6VQP, had to be heard to be believed.

Regarded as one of the nation's leading experts in the field, Hendershot did more than just describe ACSB. Jim put on a demonstration of a stable and clear voice channel repeater system with excellent impulse noise rejection, is spectrum efficient, and only requires a 5 kHz channel for voice and 3 kHz for data.

Many attending the meeting came away with the feeling that ACSB could be the wave of the future in two-way amateur relay communications, eventually replacing FM as the dominant mode on all VHF and UHF bands. (Westlink Report)

DX NEWS

ART HUBERT, N2AU

The DX news from around the world as exchanged on the IRSA net and from other sources: DX Report, Frankford Radio Club, Kansas City DX Club Newsletter, LIDXA Bulletin, QRZ DX, NCDXC CW Bulletin, South California DX Bulletin, Westlink Report, Worldradio, K4OD, KW5K, KE2C, VE3BMV.
The IRSA net operates on Sundays around 14.200 MHz, starting at 2000 Z and 3.830 (Mondays and Fridays at 0200 Z).

Fall conditions and DX contests will be in full swing when you read this. The low bands will be full of DX, especially now that propagation on 10 and 15 is suffering from lack of sunspots. With the amount of interest and DX on 160, DXCC on this band in a single season is obtainable. After reviewing the result of the 1984 CQ WW DX phone contest, DXCC on 75 meters can be obtained in one weekend. Check N2AA's country breakdown by bands, 100 in a single weekend even with a beam - outstanding!

For the DXer or pursuer of 5BDXCC, contests mean being able to pick up new countries in a short period of time. DXpeditions and contest stations who show up on the low bands to pick up multipliers activate countries which normally do not operate these bands. The lack of propagation on 10 and 15 also helps promote more activity on 160, 80 and 40 meters.

What is needed to work this DX? Big beams and high dipoles along with gobs of RF make it easier, but they're not a prerequisite to work DX. Verticals or dipoles at modest heights, with several hundred watts, coupled with good operating techniques will help you land your share of the booty. The super stations who have the arrays and power will sit on the band edge, all CQ and run stations. So, by tuning higher in frequency you can find lots of DX without large pileups. Also contesters are looking to make the greatest amount of QSOs in the shortest amount of time and do not spend a great amount of time if a higher band is open, so by spending more time on 160 or 80 you can catch a DX station that shows up for a short amount of time. So, if you're a newcomer to low band DXing, come on down and try it - you'll like it.

In regard to contests, I think that the structure of the CQ WW DX contests in October and November needs to be changed. It now is set up that stations in the same call area compete against each other. After reviewing the results of past contests, I believe certain geographical areas are at a distinct disadvantage compared to other locations in their competitive area. A W2 in Buffalo, NY to compete with a W2 on Long Island, NY is almost impossible if their stations are comparable. For a station in Arizona to compete with one in Washington is not fair. There's 1500 miles or more difference in distance, not to mention propagation differences. It's like asking a W1 in Maine to compete with a W4 in Key West, FL. If you agree with my thoughts or even disagree, drop me a post card with your opinions.

A92EM, Bahrain

active around 14.040 from 2100Z. QSL via G3XHZ.

C9, Mozambique

AB9Y/C9 active on 14.205 and 14.227 on an irregular schedule. SM0DQE/C9 and SM7DZZ/C9 also reported active.

D44, Cape Verde

N6TJ plans CW operation from D44BC in November during the CQ WW DX contest.

GUØ, Guernsey Isl.

PA2FAS plans operation from Oct. 23 - 30 during CQ WW Phone contest.

HC8, Galapagos Isl.

K8CW plans CQ WW DX Phone operation Oct. 23-30.

J28EI, Djibouti

showing up on 7.025 or 7.003 at 0200, also on 160 m. QSL via FC1JEN.

KH9, Wake Isl.

KB6DAW and NY6W have a DXpedition planned from October 22 to November 4 from Wake Island.

S92, Sao Tome

S92LB has been showing regularly around 14.185 starting around 1900Z. Several US stations have stated that they have received Luiz's QSL card. So far Luiz has refused to send documentation to the ARRL.

Also rumored expedition by two Brazilian hams for 10 to 14 days, possibly in November.

ST2, Sudan

N7DF now has a license for ST2 and hopes to be active on 40 and 80 meter SSB and CW. QSL Lee via KØHGW.

SVØDX, Dodecanese

is working for VOA and will be there for two years. Active on 14.153 at 1800Z

TR8CP, Gabon

found on 14.213 at 2330Z. QSL direct to Box 177, Libreville.

TT8, Chad

N7DF/TT8 on 14.180 from 1700. QSL via KOHGW.

VK9, Willis Isl.

Kim VK9ZB has been active on 20 through 80 meters. He shows on 40 SSB with ZL2AAG on Monday mornings at 0700Z on 7085 kHz. Also occasionally on 7185 from 0500Z. On twenty meters at 1215Z on 14.158. He is now installing a new 80 meter antenna to help his signal into the East Coast.

VK9X, Christmas Isl.

VK9XJ and XZ are now active, been heard on 14.172 at 1140Z and 1350Z. Also 14.200 at 1300Z.

VKØ, Heard Isl.

Jim Smith, P29JS-VK9NS, is rumored to have another go at Heard Island (VKØ). Two different times have surfaced. One has the operation taking place in late September and the other in January 1986.

Also ANARE expedition leaves Hobart on Sept. 16 with arrival expected around Sept. 29. A radio technician is in the expedition but it is not known if he is licensed

YB, Indonesia

YBØWR op Lumban promises to be active on 80 and 40 meters. He put up a new three element Telrex beam for 40 meters. He now is in the process of installing a new 4 element KLM beam for 80 meters. Lumban was quite readable into the East Coast around 2300Z via long path. QSL via CBA.

ZA, Albania

With all the rumors that have been floating around, nothing has been heard from Albania. According to rumors from Europe, DJØUJ has given up, and DL7FT thinks it's almost impossible to get a license to operate in ZA land.

ZC4, UKSB Cyprus

The Club call of Dhekelia Base is ZC4ESB and call for Episkopi Base is ZC4EPI. Active stations on from Episkopi are ZC4AB and ZC4AM. On from Dhekelia are ZC4WW, ZC4CZ, ZC4JV, ZC4MR, ZC4AC and ZC4NL. ZC4WW, op. Fred, will be leaving in early September for England.

ZL7AA, Chatham Isl.

near 3.795 daily from 1000Z. QSL to Box 71, Chatham Isl.

ZL8, Kermadec Isl.

ZL8OY beginning about Sept. 15 on 20 and 40 m.

ZM, New Zealand

From October 1, 1985 till the end of the year, New Zealand amateurs will have permission to use the ZM prefix. A special station, ZM6ARU, will be active from November 9 to 18. NZART will issue an award for contacting ZM6ARU and other ZM stations. Stations outside ZL need a QSO, with ZM6ARU plus two other ZM stations or just QSO a total of seven different ZM stations. Send log data, no QSLs, plus six IRCs to NZART Awards Manager, Jock White, ZL2GX, 152 Lytton Rd., Gisbourne, New Zealand.

Peter I Isl.

JF1IST is planning to possibly activate Peter 1 Island in late December or early January. A Japanese Antarctic research group will supply the transportation. If you would like to accompany JF1IST, contact his QSL manager, JR1HHL.

5B25, Cyprus

Cypriot amateurs can use the 5B25 prefix in celebration of 25 years of the Republic of Cyprus until the end of

1985. Stations now using the 5B25 prefix are: 5B25OA on 14.158 at 2030Z, 5B25MD on 14.158 at 2030Z, 5B4MF on 14.209 at 2200Z and 5B4LP on 14.221 at 2100Z. QSL to their respective 5B4 calls.

5X5GK, Uganda

active daily around 14.180 from 1800Z QSL via DJ5RT or JA1BK.

70, PDR Yemen

according to Eva PY2PE Alain 6W1HB is now in Yemen and has been given permission to operate. He was supposed to show on August 9 at 2330Z (INDEXA) which did not occur. Alain also holds an ON8 call, possible ON8HB which is Alain's QSL route. Let's hope that there is some truth to this rumor.

(de VE3BMV:) Alain has been showing up on the low end of 20 m SSB working mainly in french. He is not DXer and doesn't care about working the world and pile-ups. Just wants to chat with his friends. Perhaps Alain will get persuaded to hand out some contacts to many deserving ones. Stay alert and learn some french!

7Q7, Malawi

7Q7LW, Les is active again on 14.220-233 at 1900 and 2300Z. Also been active on 3.505 and 7.005 after 0300Z. QSL via CBA.

9Q5, Zaire

More activity has been showing up lately from this one. WA9PCI/9Q5 on 14.260 at 2100Z and 9Q5HT on 14.200 at 1900Z. QSL via ON5HT.

PREFIXES

The following new or rare prefixes have been heard on 20 meter SSB or CW: CH5AGA, CN6DKH, ED5ICE, EU7L, HSOA, HW5BM, I2DMK/ID9, PA6SAI, PW8VMC, RD6DJ, TA3C, UBOMA, VA1NG,VG9ASJ, VI3DP, VI4SS, VI5QB, VI5RM, YB3CEV and YB4FW.

Those SO prefixes you hear on the DX bands are foreign operators in Poland.

Received a letter from Carl, K4OD. He states that he still can supply QSLs for his past operations. EP2OD, EQ2ITU and 9D5B from mid 1975 till March 1977. Also cards for HP1XOD, PY1ZAL and OA4DX from 1968 to 1972. He believes that many of the EP cards went astray. You can reach him at the following: Carl Bethel, Jr., K4OD, POB 135, Front Royal, VA 22630.

Ed Kritsky, KA2MXO, has printed a list of USSR Oblast level QSL bureau addresses. Those who have used these addresses have reported good results. Ed is selling the list for $4.95 and using the money to send Callbooks and other amateur publications to Soviet amateurs. You can reach Ed at POB 715, Brooklyn, NY 11230.

IOSNY, who recently operated from ZB2, is the holder of several world records for distance on the 10 and 24 GHz bands. Anyone for microwave oven DXing?

SM5AGM, who fathered the world locator system (Maidenhead Locator), has published a world atlas which enables you to determine the field of the station worked. This atlas is availble from SSA, Ostmarksgaten 43 S-123, 42 Farsta, Sweden. Cost is 6 IRCs plus a large SAE (A4). The SSA also issues an award for working a certain number of fields. Rules for the award are available from the SSA for two IRCs and a SAE.

Fred Smith, WB4KCL, has published a 1985 supplement to his QSL Directory. If interested in a copy, contact Fred at 2265 Sweetbriar Dr. Alexandria, VA 22307.

After reading about Mt. Athos, I wonder where one has to operate from to be a valid SV/A QSO. Hope to write more on this subject in a later column after obtaining more information.

The 3.5 MHz DX window of 3.775-3.800 established at the last IARU Region 1 Conference states that these frequencies shall be used to work DX from 2 hours before sunset until 2 hours after sunrise. Does this work in Europe? In North America I don't think it would have a chance.

The cost for an amateur license in Australia is $21 Australian and $200 in the Seychelles annually. Ours is a real bargain in the U.S. - 22 cents for postage for a license that's good for ten years.

Congratulations to Bill, K2TQC, for being the latest recipient of 5 band WAZ, not an easy feat from Western NY.

Has anyone received a QSL card from the HCO operation during the CQ WW SSB DX contest of several years ago? After three different tries of IRCs, HC stamps and a registered letter that was refused, I'm not sure if they ever QSLed that operation. Makes one think about obtaining a card for the HC8E operation in August.

Can anyone supply information on the whereabouts of the following: ET3USE-1974, K3RLY of the original INDXA of the early '70s and 9J2XZ, who came stateside with the call WA0ZZT in the late '70s? The operator's name was Don Sargent. Drop N2AU a line if you can supply any information.

I (N2AU) will try to help anyone in obtaining past due DX cards form operations prior to 1984. Please send your QSL card (made out with all the necessary information) along with a SASE and a green stamp to cover postage costs.

DX Conventions:

The Southern California DX Club will host the 1986 annual DX convention in California from April 18-20 in Visalia at the Holiday Inn.

QSL routes

A35PP	—ZL4QS	IY4FGM	—I4IKW
A92DZ	—G3VIE	J4ATC	—W1BFA
A15TP/TF	—W3HNK	J5WAD	—W6CNA
AM8ORM	—EA8RCP	J6LKZ	—KE1A
CT3EU	—G3PFS	J28EI	—FC1JEN
DX1N	—JJ3FMP	JY5CI	—G4WFZ
EF5UIT	—EA5CS	JY9MG	—JR3XMG
EH9IA	—EA7GW	JY9RL	—WA6POZ
FG7AS	—FK0AT	JY9WR	—G4ATS
FO8BI	—FD6HSI	NJ2D/VP9	—K2JF
FO0FB	—WB6GFJ	OG3AA	—OH3AA
G3KQL/TT8	—W4BWS	OH0MM/OJ0	—OH2KI
HP1AC	—KM7Z	ON4OS/4S7	—ON4OS
HP1XKA	—JA7AGO	ON6TW/GU0	—ON7JF
HS4ANH	—OE2REL	P29SN/ZL1	—ZL2BOF
HS0IYY	—JA8ATG	PT0MI	—W3DJZ
HW7G	—FK0AT	S92LB	—CT1OH
I2DMK/IB0	—I2MQP	SV9CS	—Bureau
I8UDB/IB0	—I8QLS	SV0DH/5	—Bureau
IP1VXA	—I1BPU	T3OAT	—G4GED
T31AT	—G4GEU	ZC4CZ	—G4MJQ
T32AB	—N7YL	ZC4WW	—G3ZNF
TF5TP	—DL7MQ	ZK1XE	—WB6GFJ
TK5EP	—F6EYS	ZK1XN	—W3VH
TK7GAS	—FK0AT	ZV2BW	—PT2ADV
TO7GAS	—FK0AT	ZV2ACW	—PT2ADV
TZ9WC	—DL4BC	ZV2ADV	—PT2ADV
UM8MU	—W7PHO	3D6AA	—KB5DQ
VK0DJ	—VK3DYL	3V8PS	—IN3RZY
VP2E/NL7G	—KL7GNP	3X0HAB	—DL8CM
VP2M	—KG6IP	4S0AA	—ON4OS
VP2MD	—W2RQ	5H3QM	—VE7QM
VR6JR	—G3OKQ *(See Note 1)*	5T5MS	—HB9AAA
WA1ZCE/SV8	—WA1ZCE	5U7LD	—IN3RZY
ZC4AB	—G4SDJ	9J2LL	—I2SB
ZC4CW	—G4JFI	9Q5MA	—K1VSK
		9X5WP	—WB6VKD

A92DU	—P.O. Box 20712, Manama, Bahrein
A92EM	—Frank Jolley, 30 Oban Drive, Blackburn, Lanc. BB1 2HY, England
A92P	—PO. Box 14, Manama, Bahrein
AH9AC	—P.O. Box 445, Wake Island, via Hawaii 96898
BY1QH	—P.O. Box 2654, Beijing, People's Republic of China
BY5RA	—P.O. Box 730, Fouzhou, People's Republic of China
BY0AA	—P.O. Box 202, Wulumuqi, People's Republic of China
D44BS	—Angelo Mendes, 137 Chestnut Street, New Bedford, MA 02740
FK8EJ	—P.O. Box 672, Noumea, New Caledonia
FK0AT	—Sharad Sahai P.O. Box 2899, Noumea, New Caledonia
FP4CJ	—P.O. Box 37, St Pierre et Miquelon
FY7AN	—P.O. Box 746, Cayenne, French Guiana
HP1AZO	—P.O. Box 6213, Panama City 5, Panama
HP1PK	—P.O. Box 4304, Panama City 5, Panama
HS0A	—P.O. Box 2008, Bangkok, Thailand
IH9ZYP	—P.O. Box 25, Pantellera Island, 91017 Italy
J88AB	—Ron Bailey, Stoney Ground, St Vincent, W.I.
P29PR	—R. Parkes, P.O. Box 2778, Boroko, NCD, Papua New Guinea
PY0FG	—P.O. Box 10, 53990 Fernando de Noronha, Brazil
PZ1BK	—P.O. Box 1153, Paramaribo, Surinam
S79CW	—P.O. Box 4, Mahe, Seychelles
S92LB	—P.O. Box 147, Sao Tome
SV0AH	—P.O. Box 55, Rhodes, Greece
TA1D	—P.O. Box 1167, Istanbul, Turkey
TI1CUR	—P.O. Box 84, 2050 San Jose, Costa Rica
TI2KD	—P.O. Box 523, San Jose, Costa Rica
TR8PC	—P.O. Box 177, Libreville, Gabon
ZD7YL	—P.O. Box 25, St Helena Island
5A3TB	—Mohammad Arifi, P.O. Box 2325, Tripoli, Libya
5B4OS	—P.O. Box 7040, Nicosia, Cyprus
5H3DG	—D. Giles, c/o Stohert Group, P.O. Box 6306, Dar es Salaam, Tanzania
5H3FG	—D. Giles, c/o Stohert Group, P.O. Box 6306, Dar es Salaam, Tanzania
5N8ZHN	—P.O. Box 293, Kano, Nigeria
5T5RG	—P.O. Box 322, Nouaghibou, Mauritania
5Z4WC	—P.O. Box 49460, Nairobi, Kenya
6W3NU	—P.O. Box 72, Diourbel, Senegal
9K2BZ	—Abdul-Jabber Marafie, P.O. Box 1262, Safat, Kuwait
9X5BJ	—P.O. Box 626, Kigale, Rwanda

Notes
1. Expect a delay of five months for your card.

The annual New England DXCC dinner will be held on October 12 at the Elks Lodge in West Concord, MA. Details available from K1VHS.

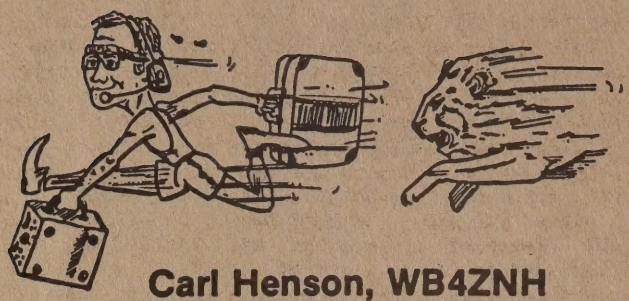
The 1985 ARRL National Convention in Louisville, KY will have a DX forum on Friday, October 4, at 3 p.m.

GOT DX NEWS?

To make this column as informative as possible, I need input from RADIOSPORTING readers. In addition to the IRSA net frequencies and times I will also be on 14.250 MHz at 2300Z Tuesday evenings and 3.830 MHz at 0200Z Friday mornings. Also, information can be sent to me at my home address and I will reimburse your postage costs if you wish. Thank you for your help.

Arthur Hubert, N2AU
436 N. Geneva Street
Ithaca, NY 14850 USA

DXpeditioning



Carl Henson, WB4ZNH

Before I begin telling this sequel of the adventures of Carl and Martha, some information should be passed on. In my earlier column about trying to remain healthy on DXpedition, I mentioned that I had a severe reaction to Chloroquin. After being taken off of Chloroquin, my doctor prescribed Fansidar as a preventative of Malaria. Martha came across an article on Malaria in OUTDOOR Magazine. Oddly, it mentioned drugs taken to prevent Chloroquin-resistant strains of Malaria. Fansidar is NO longer recommended as a Malaria prophylactic. In fact, during 1984, 1 person out of between 16,000 and 25,000 who took Fansidar died! Moreover, death by Fansidar (a sulpha derived drug) reaction is a very horrible death. The skin sloughs off as if because of a terrible burn. There are other alternatives, so don't give up, just don't take Fansidar! Interestingly enough, it IS recommended for the treatment of Malaria; there have been NO reported deaths from using Fansidar to treat Malaria!

Many DXers have told me that they too would go on DXpeditions if they worked for an airline and could fly all over the world free. Well, it don't quite work that way! We do get some nice discounts but in this age of airline deregulation, any citizen with a little careful planning can get practically the same deals I get, with a single exception. They get to make RESERVATIONS; I don't!

Martha and I had received the answer to our letter mailed months earlier; it described in two or three short sentences the requirements for an 8Q7 license. It was easy, a piece of cake! Simply walk into the PTT office, show a copy of your foreign license, sign a paper, and pay the equivalent of about $1.50 and presto, you are an 8Q7! It is easy, all except getting there. Even with daily airline traffic you have to "know" someone to get to the Maldive Islands!

From Atlanta, Martha and I flew Delta's Royal Service to San Francisco. With no time to visit the famous Fisherman's Wharf, Chinatown or any of the other great tourist attractions, we beat feet right over to JAL. "Oh, so sorry, our flight to Hong Kong is completely full, maybe tomorrow." Wow, could you believe it? Martha and I would have won the Super Lotto if we had been playing it instead of Ham Radio! The one time of the year we had chosen for our DXpedition to 8Q7 was during Chinese New Year. Don't ever try to travel to Asia without plane reservations during the season for Chinese New Year! It makes Christmas look like Arbor Day!

After missing several Hong Kong flights, we got out our stand-by stand-by tickets (another thing airline people do a lot). On the second try, we were on our way, comfortably downing hot Sake in the seat of some traveler possibly stuck in San Francisco traffic, or for some other reason, had been a NO SHOW. This flight took us to Tokyo's new Narita airport. Martha and I had already decided to have a vacation in Japan visiting our many JA friends and seeing Akihabara (the famous electronics district) if we could not get out of Narita. You develop a sort of reckless abandonment after a while. Sort of a "Oh, what the hell, we can have fun anywhere" attitude. By accepting the negative instead of complaining about it, you can get a lot more enjoyment out of life.

The next day at Narita Airport, the outlook was dismal. Everything was booked full and over booked. Again fate smiled down upon the weary idiots. We were grinning from ear to ear as we crowded into the last two seats on a JAL 747 for Hong Kong! Surprisingly, all of the passengers around us were Europeans. An hour into the flight and about four little bottles of hot Sake later, Martha punched me. "Carl, what are you doing?" Without realizing it, even though I was far from drunk on alcohol, I was high as a kite! We were going to make it to 8Q7! I had been swaying to the music in the headset and humming along! I just grinned. Those Europeans were a happy crowd as well. They were a championship ski team who had given a demonstration in Tokyo. The women's freestyle champion was a sexy young French lady (oh, to be 20 again!). This team (Olympic, I think) began to party, and surrounding us, it was easy to join the fun. There was a community liter of GOOOOD whiskey and the fellowship (personship?) was fantastic.

All too soon, the beautiful harbor of Hong Kong came into view and we were sitting in the airport terminal, too tired and with insufficient time to see Hong Kong or get a hotel room to get some sleep. The Hong Kong heat and humidity were suffocating. To help kill the hours before the next flight, I telephoned VS6DO and enjoyed a few minutes of chatter with Paul before going back to sit with the luggage while Martha took her turn to see the airport shops. Paul was pleased to get the message to W4KPQ and 4S7JD on their regular 20 M schedule of our arriving flight in Colombo.

The British Airways flight was so typically British that it seemed entirely out of place in the Orient. It was an evening flight and still chasing the sun, we watched the sunset for what seemed like an hour while we winged our way across or near such prime DX spots as 1S1, HS, XU, XZ, XV, XW, and VU7 (Andaman Islands). The flight was nearly empty, so after dinner, Martha and I each selected a whole row of empty seats and took a much needed nap.

Customs and Immigration in Sri Lanka was not difficult, but since I had not started planning quickly enough, I was bringing the necessary application for a 4S7 license rather than posting it to Ernest, 4S7EA, as he had suggested. We were not permitted to bring our radio equipment into the country, since we didn't have licenses. With the receipt for the rigs safely in my wallet, we were finally ushered through the doors into Sri Lanka. It was already past midnight and there stood Ernest waiting to take us to 4S7JD's house. It was about a 26 mile drive from the airport, but it passed quickly with 3 DXers talking almost non-stop!

We drove past banana trees and many other exotic sights and sounds of evening in Asia. At last we turned down the driveway of Jay, 4S7JD. Ernest's

headlights danced on the high walls of other homes and came to rest on Jay's garage door. There on the other side of the world, right in the middle of the garage door (obviously for our benefit) was a bumper sticker! It proudly suggested, "FLY DELTA'S BIG JETS"!

Jay and his lovely wife, Alice, extended the nicest Southern Hospitality a person could ask for, while Ernest worked with his friends to get us a spot on a tour to the Maldive Islands. This alone was probably the singular most difficult chore. It seems there are so many Europeans trying to reach the Maldives, that the Sri Lankans have little difficulty in side-tracking them so they will spend some of their money in Ceylon. Again, winter is the absolute worst time to try traveling to 8Q7 because so many people from cold climates are on vacation. Ernest's friends succeeded! Soon Martha and I were enroute again on Indian Airlines, full fare, no discount.

It seemed that each stop along the way got hotter and more humid. The Maldive Islands were the nearest to the equator and the furthest from a land mass. The capital, Male (pronounced Mah-lay), was on one small island, the airport on another, and each of the many resorts were on individual islands. The Maldives are Islamic and therefore nudity and alcohol are not permitted. Nudity means more skin showing than a woman's face and hands. The Maldives are a very poor nation and thus can not pass up those tourist dollars. (Funny thing about tourist DOLLARS. The rates are all in U.S. dollars, but hardly any Americans go there. This means that every time a tourist buys or pays, there is a currency transaction and, with no regulated banks to handle it, a very favorable rate exists for the Maldivians.) Being a practical people, the local government decreed that the national laws regarding nudity and alcohol only applied to inhabited areas. So they set up the resorts on "uninhabited islands."

If luck is a Lady, then she is most definitely a DXer. Our flight arrived on the Thursday evening before Mohammed's birthday (read Christmas Eve!) and just after office hours. I showed our letter from the PTT to the Tour's Maldivian Agent. He explained about the Holiday and he told us that we should go to Male on Monday. When we asked if there was any possibility for that evening the Agent said that he went to school with the man who had signed our letter. With a telephone call, we were assigned 8Q7AF (me) and 8Q7AG (Martha). I then paid the man enough for the license fee (sending the license to us by boat) and a generous tip. Then we boarded our boat to our lovely little uninhabited island and had a GREAT time DXing!————————(WB4ZNH)

Tyuichi Tatsumto, JA6SVP enjoys his "foreign" rig.

160 m BANDPLAN

Dear Fellow 160 DXer,

This letter is prompted by a letter dated August 21, 1985 which I received from Jim Dionne, K1MEM. Jim's letter referred to a 160 meter band plan published in QST (August, 1985). The letter also contained some timely remarks and suggestions. The letter was directed to all 160 DXCC holders plus K1KI, Jim's New England Division ARRL Director.

Since you are a 160 DXCC holder I believe you have received a copy of his letter and are interested in the present 160 situation. My purpose in writing this letter is to lend help and support for Jim's effort and add a few of my own remarks and suggestions. Please read Jim's letter again for details. I will try to summarize what I believe is a good, simple and workable 160 band plan which still leaves the lion's share of the band to SSB. My proposed plan is simple: 1800-1840 CW, 1840-2000 SSB and other modes. This would be the only mandatory FCC rule change. The traditional 1825-1830 DX window could continue by voluntary agreement along with a voluntary 1907-1913 JA window and a possible voluntary 1850-1860 SSB DX window. Don't bother the FCC with reasons for these voluntary windows. Keep it simple.

This plan is essentially the same as proposed by K1MEM. However, Jim appears willing to settle for a voluntary CW/SSB plan if we are unable to get ARRL support for a FCC rules change. I firmly believe that no voluntary CW/SSB split plan can be successful. Even though they are in a minority, there are just too many hard heads and anti-ARRL hams now using 160. As you know, the HF band sickness has already spread to 160, the last HF DX frontier. It is probably too late to save 160 DXing for this coming season, but let's not let 160 DXing go down the drain because we didn't try!

Another point I would like to make is this. The de-regulation of the amateur service by the FCC has been a fiasco from the beginning. Much of the present sickness on the HF bands is a direct result of the FCC de-regulation and the timid acceptance of the situation by the ARRL and its Directors! Previous petitions to the FCC for a 160 CW/SSB band split were brushed off because they were submitted by individuals (W8JI, AD8I, KH8AC), yet a CW/SSB band split on the new 12 meter band was created by the FCC with a stroke of the pen.

My principle objective in this letter is to try and convince you that any voluntary CW/SSB band split will not succeed. If you feel as strongly about it as I do, please write to your ARRL Director now. We need an ARRL sponsored petition to the FCC requesting a rules change with a mandatory CW/SSB band split. Nothing less will do. Many other reasons are contained in Jim's letter. If you do plan to write, please do it now -- well, before the October ARRL Board meeting.

73 and DX
Dave Kennedy, N4SU

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WANTED!

RADIOSPORTING is looking for column leaders for the following departments: DX Monoband Reports, IRSA Awards, IRSA Contests, VHF/UHF, Satellite, Club Corner, Contest Results and Records,etc.

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THE FIRST SSTV FROM SPACE

The first amateur transmissions of slow-scan form space took place on Thursday, August 1, when Dr. Tony England, WOORE, fired up the Shuttle Amateur Radio Experiment (SAREX) package on the space ship Challenger and began his automated "ham in space" operation. As the orbiter cut across the United States form the southwest to the northeast on orbit number 50, the slow-scan television images were received on the ground with a varying degree of success by hams at the Jet Propulsion Laboratory near Pasadena, California; at the Chaminade private high school in Canoga Park, California; by the Johnson Space Center Amateur Radio Club station W5RRR at NASA - Houston, by others around the world.

In Gwent, Wales, Bryan Davies, GW3KYA, operating club station GW3HW at the Blackwood District School, is believed to have been the first station to hold a two-way QSO with WOORE in both voice and SSTV modes. In a telephone interview with Westlink Report, Davies said that his contact with Challenger had originally been scheduled for orbit 47 on Thursday night, August 1. WOORE was a no-show, and Davies later learned from the RSGB that Astronaut England had been busy with Spacelab business and was unable to keep his schedule. On Friday evening, August 2, Davies was awaiting a possible contact with WOORE during orbits 61 or 62, when he received a call directly from Houston informing him that WOORE would attempt contact during pass number 61. As Davies described it, "About 10 minutes later, he came up out of the noise. It was marvelous, simply marvelous." The QSO lasted about 6 minutes and was described as an "informal chat." It included the transmission of an SSTV picture of WOORE holding the QSO.

Also scheduled for a Thursday evening QSO with WOORE was Charles Ronen, 4X6KU, located at Kibbutz Tzoraah, near Jerusalem, Israel. Ronen was doing the annual military duty required of all Israeli citizens, but was given special leave to hold the QSO. At the appropriate time, Ronen attempted to make contact, but because of troubleshooting work aboard the shuttle, England was not able to keep the sked. 4X6KU had to return to his military duty, and an attempt to contact another station in Israel was made.

Paul Courson, WA3VJB, at NASA - JSC, informed us it was his understanding that the Japan Amateur Radio League (JARL) had been successful in their QSO attempt with the sent by Tony England. On schedule for Saturday was a contact between WOORE/space mobile and America's first ham in space Dr. Owen Garriott, W5LFL. Courson told us that all QSL and SWL reports concerning the STS 51 - F operation should be sent to the ARRL, which will again act as QSL manager for the mission. The address is Ham in Space - 51F, American Radio Relay League, 225 Main Street, Newington, CT 06111.

We would like to remind you that if you have any videotape of an attempt to contact WOORE or can obtain this from local television station which covered the event, you are requested to send that material to this reporter at the editorial office address for possible inclusion in an upcoming ARRL-sponsored documentary "video" on the ham in space activities during the 51-F flight. Our next edition will carry a complete wrap-up on the 51-F mission.

(Westlink Report)

EFFECT OF VLF ON PROPAGATION

Communications is one technology that stands to benefit from a better understanding of earth's upper atmosphere. Researchers at Lockheed Research Laboratory, Palo Alto, CA and Stanford University recently confirmed the long-believed theory that man made very low frequency (VLF) radio waves influence the behavior of earth's ionosphere and magnetosphere.

Specifically, the researchers confirmed that VLF radio waves move along earth's magnetic field lines to great altitudes and dislodge electrons that are dumped into the ionosphere - a process that is identical to that caused by heavy sunspot activity. According to Dr. Joseph Reagan, manager of Lockheed's Space Scientist Laboratory, confirmation of the theory will aid in understanding communications disturbances caused by increased sunspot activity and provide insights into potential new forms of radio communications.

In the experiments, the researchers used four VLF transmitters to send a predetermined pattern of signals that traveled along earth's magnetic field lines. They looked at the effect of the transmissions through the use of instruments in a US Air Force research satellite. "This same pattern was duplicated in the form of electrons entering the ionosphere over a region several hundreds of miles long," Reagan reported to the American Geophysical Union Meeting in San Francisco.

"When these freed electrons enter the ionosphere, they create a miniature aurora Borealis - small light emissions - that can be detected by an airglow photometer. In addition" Reagan said, "X-rays are released that can be picked up by a mapping x-ray spectrometer. We have long suspected that radio waves from powerful VLF transmitters influenced the ionosphere, but until now we have not been able to prove a direct cause-and-effect relationship. With the knowledge gained from the SEEP (simulated emission of energetic particles) study, we'll be able to explore how we might use the region for improved communications and how we might minimize the effects of heavy sunspot activity on communications throughout the world."

(VE3AYL - RTTY News)

SABLE ISLAND ON RTTY

- that little spot on the East Coast of North America, may be on RTTY from time to time through the courtesy of Wayne King, VE1CBK. Wayne makes a business trip to Sable Island every seven or eight weeks. DXer Andy McLellan, VE1ASJ, has arranged for Wayne to take a TONO 7000 along on these two or three day junkets. So RTTY from Sable Island may be a reality. The Canadian Government only allows work-related trips to the tiny island because of troubles in the past with other visitors.

(VE3AYL - RTTY News)

KEYBOARDS

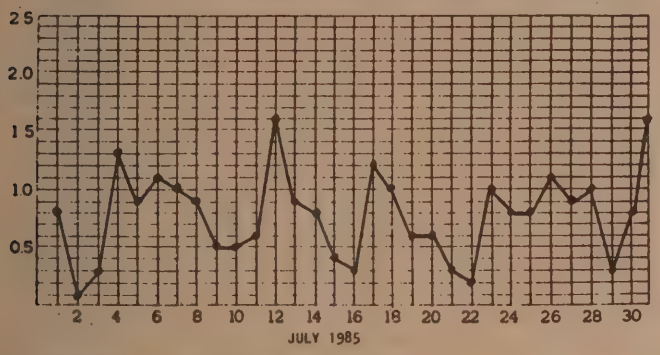
The QWERTY keyboard was designed in 1873 by Christopher Latham Sholes for the Remington Arms Company. Since then, the QWERTY Keyboard has become the worldwide standard. It has been said that Sholes original priority was to slow down the average typist by placing commonly used keys in

separate sections of the keyboard. This was done to ensure that the mechanical type bars would have enough time to fall back into place before the next keystroke had a chance to jam two bars together. Modern electronics have precluded the possibility of keys jamming, but the QWERTY keyboard continues to dominate.

Because the Dvorak keyboard was designed in the early 1930's, it's inventor August Dvorak didn't have to worry as much about type bars jamming. What he did was to design out the inefficiences Sholes put in. To do this, Dvorak studied how the average person typed. He noticed that the left hand was used more than the right hand, and that the typist's fingers frequently had to jump up and down over the middle row of letters, greatly slowing the speed. He decided that it would be easier to type if the most frequently used letters were placed in the middle row of keys - commonly called the home row.

With Dvorak's keyboard, about 70 per cent of the most commonly used words can be typed by using only the home-row keys. It has been estimated that a QWERTY typist has to move his fingers 16 times the distance that the Dvorak typist has to. And distance is not the only disadvantage. It takes a non-typist about 18 hours to learn to type at the rate of 40 words per minute with Dvorak. But it takes the same person about four times as long to learn to type at the speed in the QWERTY format.

(VE3AYL - RTTY News)



Daily Geomagnetic Planetary C_p Index

6 M BAND IN UK

UNITED KINGDOM (via RSGB) - British hams are on their way to getting a 6 meter amateur band allocation. On June 28, Mr. Geoffrey Pattie, Minister of State for Industry and Information Technology, announced in the House of Commons concerning the future of VHF bands I and II. A section of this announcement concerned an allocation to British radio amateurs and read as follows: "I am conscious that the interim Merriman Report recommended that the Radio Amateur Service should be given an allocation in the band and I am therefore proposing to fulfill that recommendation by allocating the band from 50 to 50.5 MHz to radio amateurs." The Merriman Report referred to is a paper that deals with the proposals for reallocating both bands I and II as a result of the abolition of VHF television in the United Kingdom. The action in Parliament by Minister Pattie is looked upon as a further step in the development of 50 MHz under the current experimental process.

(Westlink Report)

NEW ICOM IC-1271A 1.2 GHz TRANSCEIVER

ICOM announces the IC-1271A full-featured base station transceiver. With coverage from 1240 to 1300 MHz the IC-1271A features 10 watts of RF output power, 32 memories, scanning and multi-mode operation including ATV (amateur TV).

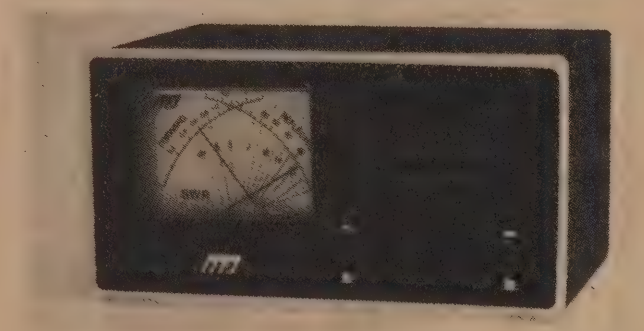
Additional Features:

1. Front end GaAs FET's for exceptional receiver sensitivity;
2. CW/FM/Upper and Lower SSB;
3. Scanning -- memory, program or mode scan;
4. 12V DC or 117/240V AC (optional)

Options include the TV-1200 ATV interface unit, IC-EX310 voice synthesizer, UT-15S CTCSS encoder/decoder and IC-PS25 13.8V DC internal power supply.

The IC-1271A will be available in October 1985. The suggested retail price is $999.00.

MFJ-815 CROSS-NEEDLE SWR/WATTMETER



MFJ Enterprises now has their MFJ-815 available. This cross needle SWR/Wattmeter enables ham operators to read SWR, forward, and reflected power at a single glance. No SWR setting is needed at any range.

The average forward and reflected power can be read in three ranges: 20/200/2000 watts forward and 5/50/500 watts reflected. SWR can be read from 1:1 to 1:5 on a two-color scale. This unit works from 1.8 to 30 MHz, and accuracy is +- 10% full scale. The MFJ-815 also features easy push-button range selectors.

This cross-needle SWR/Wattmeter sells for a retail price of $59.95 each, and can be found at many of the MFJ dealerships nationwide. All MFJ products are backed by a one-year unconditional warranty. Products ordered directly from MFJ also carry an additional 30-day guarantee.

TEACHING

Alan Kline, KB1DJ

We are pleased to welcome Alan D. Kline, KB1DJ, as our new TEACHING column leader. He is a 36 year old family man, father of two boys and the vice President of Marketing and Research for the LYN-Lad Group Ltd. of Lynn, MA.

Since being licensed in 1977, He has conducted Ham Radio Code and Theory classes at local high schools. His programs have helped over 500 people get on the air. He is a VE for the New England area and is responsible for the coordination of exams at the ARRL Region One convention at Boxboro, MA.

For a few years now, Alan has written a monthly column for World Radio of California and have had articles published in the Ham Radio Magazines. He is glad to join the RADIOSPORTING staff to write a monthly column on teaching along with his observations of our hobby as it relates to beginners and oldtimers alike.

Alan is looking forward to your comments and suggestions. (Ed.)

What does the future hold for Amateur Radio? Well, there is a trend that started in 1981 that is becoming the reality of the mid 80's.

In 1981 the FCC's Office of Plans and Policy commissioned a work paper by staffers to research and compile a paper on the future of Leisure Radio. The FCC staffers were both hams and they suggested that the Personal Radio Service be further deregulated, made more liberal and more flexible to change.

Some of their suggestions were to allow more experimentation with new technologies, like the trunking systems we are seeing in the mobile telephone industry. They also suggested the FCC recognize that Ham Radio does have a purely recreational use and frequencies should be set aside for this recreational use.

The researchers suggested that the current FCC rules are too stringent to allow the homebrewing of new gear for the experimentation in the newer technologies. They further suggested a change in the licensing structure with a no-code license for digital users of 220 MHz and above. Their most important suggestion, in my opinion, was to give Tech's more privileges, including digital and 10m phone.

For a while now, I've thought about suggesting the same idea, backwards, give the novices more privileges - 10m phone, 220 MHz and all mode. Let's do it. The CW only entry level of the Novice class has left many novices unsatisfied and thus, they have dropped out. They also drop out because they have little or no interaction with the other classes of operators. Let's give them a taste of all facets of ham radio.

Funny thing, the ARRL Board of Directors has recently suggested a similar proposal to the FCC. Here is their specific proposal:

For Technicians and Novices,
1. Morse and digital modes form 28.1 to 28.3 MHz.
2. SSB from 28.3 to 28.5 MHz.
3. All modes form 220 to 225 MHz with a 25 watt maximum power level.
4. All modes from 1246 to 1260 MHz with a 10 watt maximum power level.
5. Novice question pool increased to 300.
6. Novice exam increased to 30 questions.

I think the FCC researchers and the ARRL Board have the right ideas and we should all support them.

For the last few years I have combined the novice and the Tech license information and taught the class as one. This way my new students were prepared to take the Technician Class exams and very easily make the transition to General.

Dayton

I talked with many at Dayton who agreed with the above proposal and said they were going to support the ideas from the grass roots levels. I only talked with one ham, Bob Suding, WOLMD, who disagreed. He and I discussed at great lengths what was wrong with our hobby today.

Bob is no newcomer to Ham Radio. He was and still is a pioneer in SSTV. He has spent much time thinking about our hobby and has some firm thoughts on what is wrong with it. Bob disagrees with the general opinion that we need to increase our numbers. His theory is that we should upgrade the quality of the existing hams.

Bob feels that hams have become too much "appliance" oriented and less apt to experiment and homebrew. Bob and I discussed how even appliance operators can use the various modes we have available in more creative and progressive ways.

I, too, have fallen into that trap. I haven't done anything very creative in a long time with my station. A while ago, I did use my FSTV gear to televise my Ham Class to a local rehabilitation hospital group of patients who were studying for the novice licenses, but I only tried that project once. Bob's attitude would be to do it all the time and refine the methods.

Bob feels that the quality of operation is far more important than quantity of operators and I agree. Maybe if the FCC accepts the ARRL's latest proposal we will all get what we want, more active hams who think about new and inventive ways to use our hobby.

Other Thoughts

I don't have the time to write all my thoughts down and get them published in time so that they can do any good. With the current ARRL and FCC proposals floating around to change the structure of the novice and tech classes, I dug out some random notes I had made on similar subjects.

New License Class

The novice and tech license should be combined into a new class possibly called the "Nova-Tech" or "Experimenter." They could go on 10m SSB, 220MHz and up FM. I know this sounds just like the current proposal, but I made these notes in early 1979. I always taught my novice class as if they were all preparing to take the tech class exam. The only difference now is that I'd like to see us change the emphasis on this beginning or entry level to

the more practical, operating aspects of the hobby.

Computers

Home computers are hotter than ever. Kids as young as five years old are learning to use them. My boys, at 8 and 11, use the Commodore 64 and they insist they need a modem.

They didn't know what a modem was until I explained it to them. Modems use telephone lines and telephone time costs money. Money is not something they have. I further discussed the availability of the non-telephone modem we already have - my ham radio station. If they get their license they can play with all of my toys, er..radios.

Rigs

My kids do not have even $500 to shell out for even the most simplest station, but they are lucky to be able to use mine. Many kids can only use their school's rig and that's not right. The Ham community needs two newly designed rigs.

Many people don't have lots of room or money for a basic low band rig. I'd like to see someone design, manufacture and market an inexpensive low band rig with digital readout, built in AC supply and an SWR meter for under $300. Current technology has recently added the built in antenna tuner, so let's design that into the rig too.

For us more experienced hams, I'd like to see a design for a more compact mobile rig. The new Icom 735 is still too big for my tastes. I don't like to advertise that I have something worth stealing under my dashboard. The Ham who designs and markets the first low band mobile rig the size of an Icom 27A is going to be remembered not only in ham radio history, but for his many trips to the local bank.

Final Exams

If we had two Field Days a year, we could use Field Day as the final exam day for our ham radio classes. Just think about this. Not only will the students get a hands on experience with rigs, but it would be a tremendous increase to your novice scores.

If not a second field day, then how about a SET - the Simulated Emergency Test or maybe final exams for your ham class should be part of the ARRL's Novice Round-Up Week. Graduating students could be required to set up the most simplest of stations and make a few CW and phone contacts.

Lastly, at these club sponsored events, new hams could be matched up with Elmers to help them along. The Elmers must be willing to do and answer just about anything, for many new hams have so many queries about our hobby that a good Elmer can make the difference between the new ham making it or giving up.

Finale

Well, thanks for reading my meandering thoughts. I only hope they will spark your own thoughts, get those of you with more time than I to do something positive about our hobby.

KB1DJ, 95 Banks Road, Swampscott, MA 01907

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For monitoring all amateur radio frequencies, ICOM introduces the IC-R7000 25 MHz - 2000 MHz (specifications guaranteed from 25 - 1300MHz) continuous coverage receiver. The IC-R7000 also covers aircraft, marine, government, emergency services and television bands. Suggested list price - $899.00.

IC-R7000 Features:

99 memory channels; direct keyboard frequency access or main tuning knob access; easy to operate; FM-AM-SSB modes; scanning: memory mode and programmable or priority; adjustable scanning speed; narrow-wide filter selection; five tuning speeds: 0.1 kHz, 1.0 kHz, 5 kHz, 12.5 kHz or 25 kHz; fluorescent display with dimmer switch; convenient size: 4 and three-eights inches H x 11 and one-quarter inch W x 10 and infrared remote controller; optional voice synthesizer.

The IC-R7000 will be available in October, 1985.

IC-735 IMPROVED SELECTIVITY

The IF filtering in the IC-735 SSB mode consists of a 70.4515 MHz 1st IF crystal filter, a 9.0115 MHz crystal filter 2nd IF, (FL-30), and a ceramic 455 kHz filter (CFJ455K5). The absolute best IF filtering scheme from ICOM is included in the IC-751, the FL-30 and FL-44. These two SSB filters were options in the 730, 740 and 745 but the FL-44 (2.4 kHz SSB) crystal filter is not an option for the 735!!

International radio Inc. is now offering two SSB 455 kHz 8 pole crystal filters for the 735 so that you can get greater SSB selectivity performance than the 751.

Our first new SSB filter is 2.4 kHz at 6 dB, an exact replacement electrical and mechanical for the FL-44A...a drop in! Our second SSB filter 2.1 kHz at 6dB is physically larger than the FL-44A and is the one IRI has been selling as a better replacement than the FL-44A.

Below are the specifications for the original IC-735 CFJ455K5 filter and our replacements:

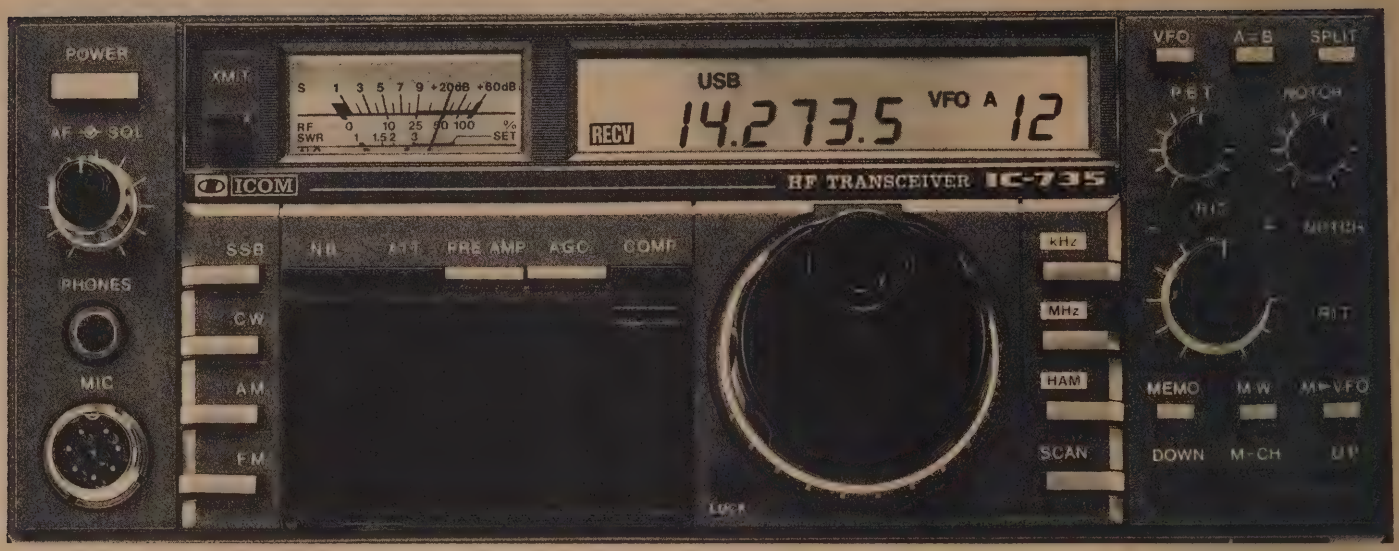
	(Good) Stock CFJ455K5 735 Filter	Best) IR-455H2.1	(Better) IR-455H1.2X Exact Replacement for FL-44
6 dB	2.4 kHZ	2.1	2.4
60 dB	4.5 kHz	3.1 or less	4.0 or less
TYPE	Ceramic 2 or 4 Pole?	8 pole crystal filter	8 pole crystal filter
SIZE mm L x W x H	23 x 8 x 10	64 x 24 x 22	55 x 22 x 17
PRICE	?	$99.00 Plus $5.00 S/H U.S.A. $10.00 Elsewhere	$79.00 Plus $ 5.00 S/H U.S.A. $10.00 Elsewhere

As you can see, the best selectivity will be obtained from the IR-455H2.1 then the IR-455H 1.2X. Keep in mind you do not transmit and receive through the 455 kHz IF filter so the transmit audio quality remains as the stock IC-735 provides.

ICOM USER'S NET
meets each Sunday at 1600 Z on 14.317 MHz +-5 kHz.

International Radio Inc.,
1532 S.E. Village Green Dr., Suite L,
Port St.Lucie, FL 33452

IRI REVIEWS IC-735



One of our favorite ICOM radio's here at International Radio has always been the IC-730. It is a compact high performance transceiver, 100 watt transmitter. When the 735 was announced, we hoped that it would come up to the 730 standards. From the results of our review, we can say the 735 has become our favorite ICOM HF radio. Thanks to the folks at ICOM!!

We purchased IC-735 No. 01493 for review and evaluation. The IC-735 is currently selling anywhere from $750.00 to $799.00. List price is $849.00. The only internal option available for this unit are the CW filter, CW keying module, and UT-30 Tone Encoder. The unit comes with the HM-12 electric condenser microphone with Up-Down buttons, DC power cord, two phono plugs, external speaker plug, two spare 20 amp fuses, two spare 3 amp fuses, CW key plug, microphone hanger, and Instruction Manual. The Instruction Manual contains 46 pages. The index showed a schematic diagram as a separate page, but it was not included in our Manual. Neither was a board component layout included. As of August 1st (the time of this review), we understand that neither schematics nor board layouts are being supplied. We would suggest you write direct to ICOM, Bellevue, WA to obtain a schematic.

A few key points worth mentioning, as indicated in the Instruction Manual, are as follows:

The rear panel of the 735 has easy access to terminals for AFSK (Audio Frequency Shift Keying) RTTY operation. Like the 730 and some other ICOM radios, when the Preamp is Off, the ICOM 735 incorporates direct feed mixer. Incoming signals are fed directly into a high level first mixer developed by ICOM. This generally produces a higher spurious response rejection ratio and wide dynamic range which is specified at 105 dB. Built into the 735 is a Band Pass Tune and notch controls. A 10 dB Preamp plus a 20 dB attenuator. Memory Scan allows monitoring of all different memory channels or only those stored with a particular mode. Also provisions for programed scan provides scanning between any two programed frequencies. Auto Stop Scan functions when signal is received in any mode. The Mode Selective Scan automatically monitors only those memories which contain frequencies with a similar mode. For the first time in any HF radio, ICOM incorporated a new liquid crystal display with soft green illumination, providing good operating frequency visibility even in sunlight. The display also indicates the VFO in Use Operating mode (A or B), Memory Channel, Split mode and Scan mode. Twelve programmable memories are provided which store Mode and Frequency. The CPU is backed up by internal lithium battery to maintain memories up to five years. The scanning of frequencies, memories and bands is possible from either the transceiver or the HM-12 scanning mic.

The 735 incorporates an advanced remote control system. Full communications with a personal computer equipped with an RS232C jack is possible by using a serial port mounted on the rear panel of the 735. The computer controls Frequency, Mode, VFO A-B Selection and Memories when an appropriate interface is used. The serial port uses a standard 1200 Baud Data rate.

Two matching accessories for the 735 are the AT-150 and the PS-55. The AT-150 HF automatic antenna tuner was developed primarily for the 735 using advanced state of the art designed techniques. PS-55 is a stand alone 13.8V DC 20 amp power supply. The PS-55 and the AT-150 are the same height and depth as the 735.

IRI LABORATORY TEST REPORT

The 735 appears to be very simplistic in its front panel appearance; however, there are a number of user controls under the plastic front panel hatch door, and in the top and bottom of the radio. All of these operator controls make the 735 a very powerful and versatile radio with a very simplistic look.

The 735 utilizes large PC board construction technique. There are two main PC boards - one designated the Main Unit PC board and the other designated the PLL Unit. Under the top cover of the radio is a rugged die cast aluminum PA unit assembly. The PA assembly utilizes a squirrel cage type blower. The protection circuit controls the fan operation such that the fan supplies cool air at a low speed at the beginning of a transmission.

When the PA unit reaches a temperature of 50 degrees C, the fan motor increases to middle speed. A temperature increase of 90 degrees C or more causes the fan to run at the high speed. Under normal operating conditions, the 735 will continue to transmit with no power reduction, at ambient temperature of 25 degrees C even when transmitting for long periods.

The front panel controls are as follows:

Power On-Off switch, AF Gain, behind the AF Gain is the Squelch control, the earphone plug is below the AF Gain-Squelch control, 8 pin mic jack below it. Directly to the right, the Mode switches SSB, CW, AM, FM, and the Transmit button. In a row are Noise Blanker, Attenuator, Preamp, AGC and Compressor, Main Tuning dial, Lock button below it, and to the right of the Main tuning dial, kHz switch, MHz switch, Ham Band or General Coverage switch and then the Scan button. To the right starting from the top - VFO Switch A or B, VFO A = B Switch, VFO Split switch, directly below it Pass Band Tune control, Notch control, directly below those two controls the RIT, the Notch Switch and the RIT switch. Below those controls the MEMO push button, Memory Write push button, transfer memory to VFO switch and an Up-Down Memory Channel switches.

The rear panel of the 735 houses:

the Antenna Output connection, 12V DC power input, which is the same type as the 730, 745, and 751 a 6 pin Molex type connector, ground connection, Receiver Antenna output jack, Receiver Antenna Input jack, transverter jack, external speaker jack, CW Key jack, ALC jack for control of amplifiers, a Send jack allowing a grounded contact in Transmit mode for linear amplifier operation and Remote Control jack. This jack is a communications port designed for a personal computer to remotely operate the transceiver's functions. The jack accepts and transmits serial data by using only one signal and one ground line. Accessory connector, the Speech Compressor Level set control, a Mic Tone control. (Controls tonal transmit audio quality.) AM Carrier control, adjusted for 40 W output carrier level, anti-Vox control, and meter switch to allow measurement of SWR or relative RF power out.

The bottom of the radio contains:

the brake adjustment screw for controlling the amount of torque required to turn the main tuning dial, CW side tone volume control, Receiver Audio Tone adjustment (bass or treble), and on the side of the unit is a Dim adjustment for the back lit LCD display. Other adjustments internally on the main unit board are a 50-100 W power control switch. Also there is space for a tone encoder unit UT-30 for FM repeater operation.

On the PLL unit board there are adjustments for scan speed, marker switch 25 kHz marker, and also a scan timer switch On-Off.

WHAT WE MEASURED AT IRI

Power output on the unit measured averaged 105W output on all ham bands.

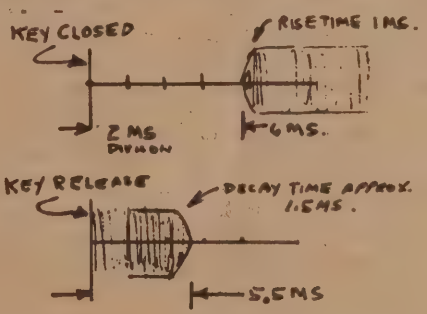
The General Coverage Transmit mod was performed on this unit by cutting diodes D33 and D44. In our unit, each diode had a plastic sleeve over it's lead. They are located near J22 approximately in the middle of the PLL Unit Board. The diodes are slightly to the left of J22 Remote Control Terminal connector. Cutting the diode allowed full power output to approximately 860.0 kHz. At 780.0 kHz, we measured 50W; at 720 kHz, 25W; at 581 kHz, 5W; at 375 kHz, 2W and at 316 kHz, 1W. The 735 could be utilized using the RF Power Control setting as an accurate, stable multi-mode signal generator source through the range of frequencies of 300 kHz to 30 MHz.

FM Mode power measured 100W; AM power measurements were somewhat different than what was expected. AM power output was low on the unit tested. At 1.8 MHz we measured 14W, 14 MHz, 20W; 21MHz, 20W; 28.8 MHz, 10W; 29.7 MHz, 5W. Turning up the AM carrier control on the rear of the 735 brought the power up to 40W on all bands. During our transmitter tests, the 735 heat sink barely got warm!! This is a good indication that the massive die cast aluminum heat sink and fan does an outstanding job keeping the 735 cool. The sensitivity of the 735 with Preamp off at 14.2 MHz measured .2 microvolts; with the Preamp on, .065 microvolts. At 28.6 MHz, Preamp off .23 microvolts; with Preamp on .08 microvolts. At 1.8 MHz we measured .39 microvolts Preamp off; .15 microvolts Preamp on. It should be noted that the Preamp is not recommended for use below 1.6 MHz as indicated in the Operator's Manual.

The Noise Floor measured with Preamp on at 14 MHz, at .01 microvolts (minus 136 dBm) the Preamp off, the noise floor measured .058 microvolts (minus 132 dBm).

We measured the notch depth to be about 50 dB which is much better than the factory specification of 30 dB, but not as good as the 751; the selectivity was measured to be 2.3 kHz wide at 6 dB, and had 4.9 kHz at 60 dB.

The keying wave form was measured. See chart below.



AMTOR switching time measurements were recorded as follows:

Receive to Transmit - 6 milliseconds
Transmit to Receive - 20 milliseconds

The 735 has a tough act to follow with regard to its predecessor the 730. The 730 is reliable and an outstanding performer in its price range. We believe the 735 is the state of the art advancement of that radio, and although the 730 was a favorite of ours here at International Radio, the 735 has now replaced it!! We at IRI would not hesitate to recommend the new IC-735.

THE IRI INTRODUCES THE HIGH PERFORMANCE IC-735

IC-735 ($779) WITH: 24 hr or more burn in ($20), complete check for performance and function ($20), 2.1 kHz SSB matched filter set ($40 labour, $139 parts), optimized alignment ($40). Package deal $958 plus shipping. (International Radio Inc.)

KNOW YOUR EARS

Yuri Blanarovich, VE3BMV

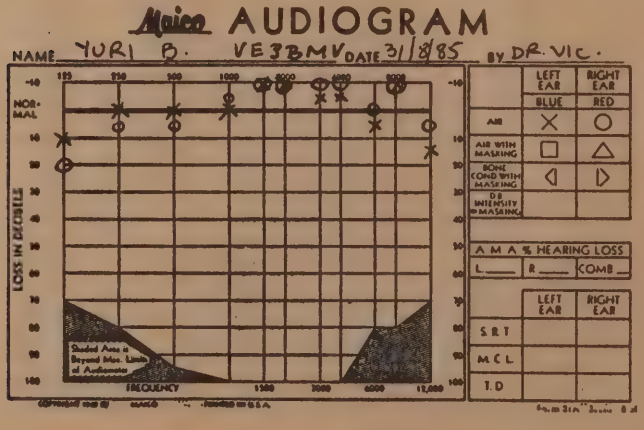
How many of you know the frequency response of your ears? Probably not too many. We know we have ears, we know we can hear, but unless we measure the frequency response and sensitivity of each ear, we don't use them to our full potential.

This is one area that perhaps shouldn't be overlooked, especially with the competitive contester. The ears are the "interface" between our brain and the rest of the noisy world. Our ears have a different sensitivity at various frequencies. Each ear can be quite different. Unless we are subjected to tests, we can only guess what is the frequency response and sensitivity of our ears.

When Vic, VE3AIA, came to take away my Telrex monobanders, I have noticed funny looking equipment in his trunk. It looked like an old radio, but it wasn't. It was an audio frequency response meter to test hearing. It was probably as old as I am but still working. I couldn't resist and "Dr.Vic" agreed to administer the hearing test. The rig was set up, old headphones were put on and I was tested. I was a bit skeptical about the state of the art of this beauty. Perhaps the headphones were out of touch with today's HI-FI marvels, but what the heck, I wanted to see how it was then, back in the good old days.

The test started at the low end of 125 Hz and progressed in steps of 250, 500, 1000, 1500, 2000, 3000, 4000, 6000, 8000 and 10000 Hz. First we tested the left ear and then the right one. The test procedure consisted of a series of tones starting at 50 dB over "normal," then gradually decreasing the volume in 10 dB steps. I had to push the button that activated the light on the front of the "doctor," letting him know that I heard the tone. Doctor then made the notes on a genuine Maico Audiogram card and plotted the points on the chart.

If the equipment was right, then it revealed differences between the left and right ear and the maximum difference of about 30 dB between 125 Hz point and the middle of the range. The measured frequency response is shown on the diagram. It appears that the left ear (using X marks) is about 10 dB better than the right ear (using O marks) in the lower part of the spectrum, but worse at the higher end. The sensitivity peaks around the middle (1200 to 2400 Hz) and both ears seem to be about the same. There was a strange peak at 8000 Hz.



While the instrument was an oldie, it told me something about my hearing. Some of that was noticeable when I operated CW. My personal preference is to listen to CW notes of about 200 to 400 Hz. Especially when the band is crowded or in a heavy pile up, the ear can distinguish better between two tones 50 Hz apart when they are 200 and 250 Hz tones, rather than 1000 and 1050. The difference in frequency is 25 percent in the first case and 5 percent in the second case. So even when I use the narrow CW filter, it helps to shift the BFO or tone control down to lower tones where I can use my ear/brain filter to separate the signals better.

But when it comes to working weak signals on 10 or 160 m, then I move up to the 1000 Hz plus range. (Or whatever your ears peak at.) Sure enough, when I couldn't hear the signal with low beat, after shifting to higher beat, that 20 dB difference in the frequency response was apparent immediately. I was able to copy the callsign. The strategy is to use the low beat when the signals are strong and many of them, but when it comes to working weak signals on the dead band, the BFO is shifted to produce higher pitched tones around 1200 Hz.

Another interesting thing was found. Our ears have their own AGC. When they are bombarded with strong sounds, they start cutting back on gain. Several times I have noticed that when a contest was over I ended up half deaf. That was mainly after listening to my strong signals on Drake twins while having the receiver on during the transmit. Also watching Vlada, VE3IXE operating, I have noticed that in about an hour or so he ended up with the audio gain way up. I realized that our ear's self defense AGC system is trying to protect us from ear destruction and is cutting back on sensitivity. This is not good when we want to listen to weak signals in the pileup jungle. Here's a good test to find out how bad the "damage" is: pick up the telephone and listen to the dial tone. If it sounds weak, then you know your AGC works and you've had too much signal administered. (Telephones maintain reasonably steady audio levels.) After a few hours the hearing comes back.

The rule now is to keep the audio level as low as practical and to keep the monitoring audio level of my own signals as low as possible. Let the ears "rest" when I transmit and to keep them sharp when needed.

Another thing that is interesting: the ears (+ brain) have some kind of frequency memory. It appears that the ear's AGC is also frequency sensitive. i.e. After a CW contest, when I switch the radio to SSB, it all sounds weird and unnatural. Looks like our ears get accustomed to listening to CW tones and become more selective and sensitive to some frequencies. It would be interesting to do the Audiogram after the CW contest to see what happens.

Reception of CW and SSB signals is a bit more than just plain listening. It takes a bit of practice to develop and perhaps to "charge" up our "sensors" and "processor." I have found that if I don't operate for a while and then just jump into the contest, I have a hard time separating the mess for about three to four hours. After that it seems

to be back to usual. Quite often people, who come by and listen to my operating, can't hear or take apart the signals that I can. Even after a while, when I listen to the tapes made during the contest, I have a hard time "grabbing" the calls from the QRM myself.

Another whole different ball game is the binaural reception, using two ears in the stereo mode with two receivers or two IF strips in them. There, the brain filtering capability can be pushed even further. I've wanted to do that, but so far haven't got to use it. I have played with two receivers but not seriously in a contest.

The ear/brain selectivity and memory can be used to receive two or more signals simultaneously. This technique can be developed and some people are using it. All this is part of the subconscious part of the brain and can only be developed and maintained by doing, doing and doing it. You can't buy this skill, you can't acquire it by reading the books. This skill makes the good operator with the crummy radio superior to casual ones with super-duper radios.

I have to confess that for the past few years I haven't had a chance to charge up my subconscious operator before a contest. For the first few hours I have always felt very uneasy and awkward when operating in a contest. I know my rates are lower than they should be, the logging is awkward, duping messed up, etc. The subconscious operator loses its "charge" if it is not used for a while. This applies to hearing, operating habits, and movements of mouth or fingers.

The frequency response of our ears changes with age and usage. It is good to know what our frequency response is and to use it to maximize our hearing's sensitivity and selectivity. Perhaps a more appropriate way of testing for our purposes would be to use the continuously tunable audio generator and transmit a series of dots or dashes while continuously attenuating the signal. More precise curves can be drawn. Once we know our frequency response we can use our ears better and hear more weak ones and separate more signals when things get tough.

The selectivity and capability to distinguish the weak signals in the noise, or among other signals, can be developed by training and practice. It pays to operate before the contests and to get conditioned for them. This way we can take advantage of the rush traffic in the beginning of the contest and will not leave having us to play a catch-up game for the rest of the contest.

To keep your ears sharp and sensitive use only as much audio gain as necessary and keep it down. Keep the volume of your CW or SSB monitoring circuit at the lowest practical level and let the ears rest while you transmit. Keep shifting your BFO or bandpass tuning from time to time, giving the ears a change. For weak signals listen with higher pitch (or whatever your hearing peaks at), for more selectivity use lower pitch. Tunable audio filters are a definite asset for serious operating. (I use DATONG audio filter.)

If the band is noisy or crowded use all the selectivity knobs you can to make it as comfortable as possible. NOTCH tuning can also be used to attenuate some undesired signals or portion of the noise from the band. Just set it on the edge of the bandpass. Definitely do not listen to loud rock music!

Is anyone involved professionally in this ear/brain business? Please let us know. (VE3BMV)

BEING A ZERO

John Chass, WØJLC

Well, it's about time for my annual dissertation on being a Ø. What prompted this was several bouts of trying to work a mildly rare Middle East station.

In round one, we experienced the famous East Coast Curtain. This curtain is generally more severe than the Iron Curtain. Ranging from 2-5 "S" units stronger at the receiving station, the phenomena usually appears as countless 1's, 2's, 3's and 4's working the station with little or none of the other call areas. It's usually followed by the following situation or comments:

a) Good afternoon Saad, this is the third time I've worked you this month.

b) After a ten minute dissertation about everything under the sun, a station will say: "Well, I don't want to hold you as I hear hundreds of other stations calling you."

c) Could you please QSY to 40 or 80 Meters - because that's the only band I haven't worked you on.

d) I just wanted to let you know I received your QSL card.

Round two was one that is all too typical. The pileup was enormous, so the station decided to work by call district. Now everyone knows that Ø comes before 1. If it didn't, my call would be W1ØJLC. The station started, as most do, with W1. He worked everyone with a quarter of a watt or more in W1, W2, W3, W4, W5 zones. He couldn't hear W6 or W7, so he started on W8. About four calls into W8, he said, "Gee, I didn't realize what time it was, I must QRT," and promptly left the air. This was one and a half hours after he started working his first W1. These experiences tend to remind me over and over about the club logo. If you haven't seen one, ask KORWL to send you a sample QSL.

Now I know to some extent this sounds like sour grapes, and maybe it is, and I guess this situation can be reversed for some East Coast stations. The simple fact is that unless you run an elaborate antenna system or propagation is exactly right, you are apt to face these situations everyday as a 0. (I have empathy with 8's and 9's as well.) I think it is good to remember that no matter what your call, that many of the stations calling may need the station for a new DXCC country. If you have already gotten a QSL and there is a pileup, let the other guys work him. They may need the QSL for a new one! (KCDXC Bulletin)

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LATEST SPACE SHUTTLE OPERATION

At a post-flight news conference August 14th, Astronaut Tony England said the Challenger amateur station worked more than a hundred earthbound stations during the mission. It is thought that thousands more monitored SSTV signals that came from Challenger in an automated downlink mode.

Tony said only he and Gordon Fullerton were able to find some spare time to operate the WOORE experiment. But there was a successful exchange of TV pictures with the Johnson Space Center ham club, W5RRR, as well as with a group of school children in the United Kingdom where Tony and his family had visited. GW6GW is the Oakdale Comprehensive School, equivalent to a middle school or junior high school in the United States.

The first TV image ever to be received in space was a picture of Tony's wife, Kathi, known also by her nickname "Spook" ...prompting Tony to note Spook had made it to space. Later Tony would monitor television pictures sent from W5RRR showing the wives of all the crew members!!!

League PIO Paul Courson, WA3VJB, watched as the first amateur SSTV signals from space were monitored at JSC. The color picture quality was very good, he reports, with very little snow or distortion. That first image was sent in an automated mode, and repeated itself several times within the monitoring range of W5RRR's tracking antenna system.

W4NYZ, John David Bartoe, was unable to get away from NASA responsibilities and did not get on the air during Challenger's troubled flight. Problems with major experiment equipment, as well as earlier flight problems due to an engine shutdown shortly after launch, contributed to a completely unpredictable operating schedule for the WOORE station.

Many participating ham clubs and youth groups called the League's information numbers in Houston to find out the latest. Some callers became surly that the predicted spare time opportunities did NOT come to pass. Courson, answering the calls, could only express sympathy that there was disappointment, but repeated the idea that spare time meant just that - spare time - and that there was never any guarantee about specific times to QSO. Other callers understood the problems and wanted only to have the latest orbital data, which changed often because Challenger did not meet its expected orbit.

Media coverage became harder to orchestrate, because ham clubs could not insure that a reporter would see a contact made. Several callers told of entire TV crews assembled to cover a club's attempted QSO, only to find the Challenger ham station not activated during that orbit. Once again, it needed to be stressed that a reporter could STILL generate a story from a club's having monitored downlink signals, if that was all that was possible at that time. The fact that a club was geared up to make the contact was usually adequate to make the story viable.

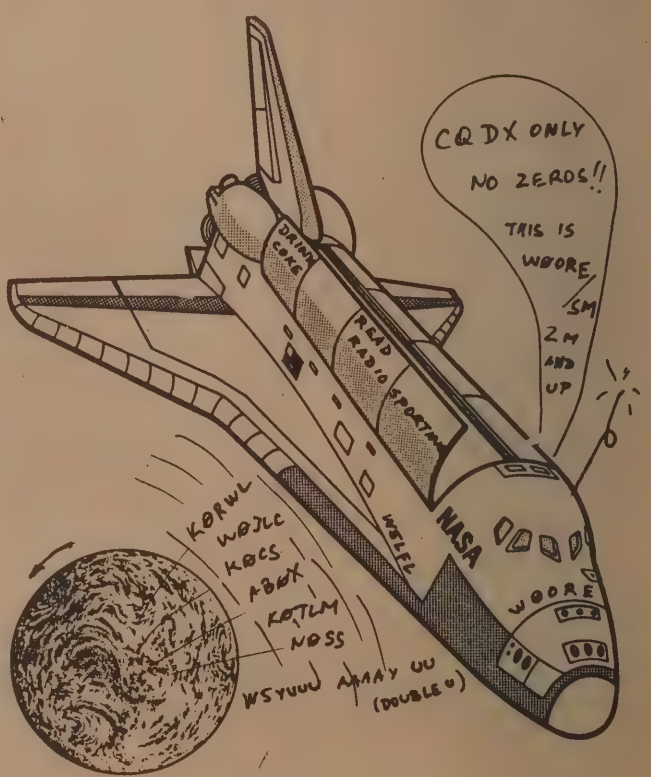
Dealing with the disappointment of hopeful young people was possibly the most difficult thing to do. Norm Chalfin, K6PGX, with the ham club at the Jet Propulsion Lab in Pasadena, California, told Courson a story about a young Boy Scout who planned to take part in an attempted QSO by the W6VIO club station. Seems the boy's mother could not get the family car soon enough to take him to the ham station, and Chalfin said the youngster was nearly in tears as he burst into the shack wondering if he had missed the whole thing. But he soon saw that the other scouts looked sad too, since the Challenger station was not heard at all!! W6VIO later would monitor downlink SSTV signals from WOORE, but was one of the many groups never to establish a QSO.

But scores of clubs DID make contact with Challenger! Mission commander Gordon Fullerton, who used to be a Novice, came on the mic of WOORE and worked dozens of earth stations during the mission. He even sent SSTV downlink signals to clubs indicating they could receive and convert them. Tony England said Fullerton at first was reluctant to get on the air but, after he saw Tony operate, he then got on often and for substantial periods of time. There's now talk that Gordon will again become a licensed radio amateur!

Many participating ham clubs and individuals got the latest orbital and mode information from WA3NAN, the NASA employee ham club at the Goddard Space Center in Greenbelt, Maryland. This station put out updates on a near-continuous basis on shortwave and VHF frequencies. Other community FM repeaters picked up this audio and re-transmitted it for a variety of areas nationwide. Monitoring these broadcasts gave many clubs just the lead time needed to get ready for a QSO with Challenger as spare time for the crew developed.

The QSL cards are still being prepared. Meantime reports are to be sent to League HQ, attention "Ham-In-Space." The ARRL is looking for a ham club to volunteer to process the reports and send out the cards.

Copies of media coverage your club received during this project should be sent to League HQ for possible inclusion in this article! PIO Courson is looking for audio and TV coverage as well as photocopies of newspaper stories. (ARRL)



1985 CLIPPERTON DXpedition

Rusty Epps, W6OAT

The 1985 expedition to Clipperton Island, FO0XX, is almost history. We've returned most of the equipment loaned to us, paid most of the bills, selected a design for the QSL card, and almost caught up on sleep! Hopefully by next week even these few remaining details will be taken care of. Then we can relax and remember the exciting times we had.

International Effort

This expedition was different from any other I know about in that it truly was an international effort. Of the sixteen operators, there were two from France, one each from Germany, Mexico, Costa Rica and Japan, two from Tahiti and eight from the USA. This gave us a great diversity in cultures and languages which not only made the expedition interesting for those of us on the trip, but also made sure there was an operator from every major population center in the world who could look after QSOs with stations from his area.

Six of the expedition members departed from San Diego on March 27, aboard the "Royal Polaris," a beautiful 115 foot (35 meter) tuna sportfishing boat. The remaining ten operators boarded during a brief stop at Cabo San Lucas, Mexico, on March 30.

Revilla Gigedo

Alfonso, XE1ZZA, had worked feverishly to get us permission to operate from San Benedicto Island. We had a 24 hour layover scheduled there to allow the tuna fishermen, with whom we were sharing the "Royal Polaris", to catch the bait they would need at Clipperton. Sure enough, the callsign XF4ZU arrived just in time. Unfortunately, San Benedicto rises vertically from the ocean and there was no good landing spot among its sheer cliffs. Rather than risk bodily injury or loss of equipment, we reluctantly decided to forego the stop and save our energy for Clipperton.

FO0XX European crew: DJ9ZB & F6GXB

First Clipperton Problem

Our arrival at Clipperton was right on schedule. But our excitement soon began to turn into frustration and disappointment when we realized the problems we were going to have getting ashore. Clipperton is surrounded by a barrier reef. On the leeward side of the island, where the ocean was relatively calm, our landing skiffs simply could not cross the coral. On the windward side, where the reef is further under water and can be traversed, the breakers were so bad that our captain concluded a safe landing would be next to impossible. So there we sat for three days - so close yet so far! I'm sure anyone who heard us as W6WX/MM those three days could tell how frustrated we were.

Finally, on April 6, we decided to go for it. First a few crew members went ashore, then came us and the gear. It went relatively well. Only one skiff got flipped in the waves, but fortunately no one was hurt and that skiff was not carrying any equipment.

First Call

While on board the "Royal Polaris," we drew straws to see who would be the first to put FO0XX on the air. Wilber, FO8GW, found the long one. We decided to open up on 20 meters SSB, so when the time came, each of us in turn took the mike and introduced himself, finally handing the mike to Wilber to make the first QSO. Ross, WB6GFJ, was waiting to pounce for the first QSO as soon as Wilber stood by.

Operating Conditions

Ultimately, we set up five hf stations, one OSCAR station, and one six meter station. In four days of operations, we made 27,000 QSOs. We had our share of problems with equipment and interference from the other stations, but in general we were able to fix most things which broke or somehow live with it. The weather was hot when it wasn't raining, and was windy most of the time. When you heard us go off the air suddenly, probably it was because the tent had just blown over or rainwater was pouring in so bad that the operator was afraid of getting electrocuted! And then there were the crabs and the birds. If we put anything on the ground, the crabs ate it. If we ventured out of the tents or from under the tarps, we were targets for the birds overhead. Their aim was unbelievable!

Trying to Leave

We were supposed to depart Clipperton on April 10; so that morning we disassembled all the stations, sealed everything inside plastic bags, and sat on the beach awaiting the return of the skiffs from the "Royal Polaris" which was perhaps 100 meters offshore. But as with our arrival, the sea was determined not to cooperate. Because of the large waves, none of the skiffs could get through

the surf. The best they could do was float a case of cold beer in to us and say they'd be back tomorrow to try again. So we unpacked one of the stations and went back on the air. We made another 4,000 QSO with this station while awaiting our rescue, which finally occurred on April 13.

Equipment Lost

Getting off Clipperton was neither easy nor safe. We got tossed violently in the surf and a few of the operators and crew members got a bit banged up. One of the skiffs flipped. This time the gear went straight to the bottom in 10 meters of water. In all, it took us ten hours to get everyone off the island. None of us was sorry to bid "au revoir Clipperton" when the big diesels on the Royal Polaris finally roared to life and we turned north toward home.

Poor Conditions

In retrospect, the expedition probably went as well as we could have expected. There was nothing we could have done about the weather to make our landing or departure any easier. We knew we were nearing the low point of the sunspot cycle and conditions on the high bands probably wouldn't be good - and they weren't. We particularly were disappointed with the low number of European QSOs, only about 1,800, but we simply could not hear them most of the time. Apparently they couldn't hear us too well either, because many of those who did work FOOXX found it necessary to have several QSOs to insure that they were in the log.

Tail-Ending Correctly

Most of the expedition's cw operators agree that they would have liked to have seen more properly executed tail-ending, because, when done right, tail-ending increases the QSO rate significantly. By "properly executed," I mean dropping in one's call after you know the DXpedition operator has the station he is trying to work. If he's come back to, say F6, don't tailend because you'll probably succeed only in wiping out the station whose callsign he is trying to get. That just slows things down. But if he sends a report to a station and has the full callsign, then wait just a moment and drop in your call about 200 Hz off the frequency of the station he is working. Most of us preferred a high speed tailender to a slow one.

Thanks

Finally, no expedition like this would be possible without lots of help from lots of people. We can't thank everyone in this story, but it would be proper now to at least acknowledge The DX Foundation, the Yasme Foundation, Ham Radio Outlet and Cushcraft for their support. Without these groups in particular, FOØXX would not have happened.

(Northern California DX Foundation Newsletter)

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READ, ADVERTISE,
CONTRIBUTE &
TELL YOUR FRIENDS
ABOUT *RADIOSPORTING*

****

Don Wallace, W6AM

Lloyd Colvin, W6KG & Iris Colvin, W6QL

The bad news is that the President of Yasme, W6AM, Don Wallace became a silent key on 26 May 1985. He was 86 years old and had served as Yasme President for the last 10 years. His history in amateur radio and DX is almost beyond belief:

1. He was a leader in the use of high frequencies in the early days of radio when spark radio was used by all communicators.
2. He was a Navy radio man in the early days of World War 1.
3. He was radio operator on the USS George Washington taking President Wilson to the Peace Conferences in Europe near the end of World War 1. He was in charge of communications between the United States and the President of the US while aboard.
4. Don wrote several articles in QST and other publications about early long-distance communications on the VHF bands.
5. He was issued a license and built an experimental radio station, 9XAX, in 1924.
6. For his early-day accomplishments in amateur radio, Don was awarded the Hoover Cup by the Commerce Department in 1923.
7. In 1923, the Board of Directors of the ARRL honored Don for the best all-around home-made amateur radio station.
8. Don wrote and published one of the first amateur radio handbooks.
9. In 1927, Don was elected ARRL Section Communication Manager in Los Angeles, a position that he held for three years.
10. From 1927 to 1932, almost every other issue of QST had articles or notes about some radio activity, notably DX, by W6AM.
11. From that time until now, Don has been one of the principal leaders of DX throughout the world.
12. For many, many years, Don has occupied the No.1 spot on the DX Honor Roll published by QST.
13. If you count pre-World War 11 QSO's, Don has worked nearly every radio amateur country in the world, including countries that have been "deleted" through the years.
14. Many hams around the world know of Don's fantastic rhombic antenna farm, on a ranch surrounded by expensive homes.
15. For the last several years, Don has held open house, once a year, at Palos Verdes Estates. Each year more and more hams have come from all over the world to visit one of the world's largest and most interesting ham stations and to hear a technical explanation by Don as to how it was built and how it operates.
16. Don traveled in nearly 100 countries, operating amateur radio in most of the countries. He has been an international ambassador for amateur radio good-will in all of his foreign travels.
17. Don was one of the first hams in the world to operate a complete mobile one-kW amateur radio station. He has enjoyed working hams all over the world as he traveled in his car, driving, and, at the same time, working stations at 25 wpm on CW.
18. In 1978, Don was elected to the CQ Magazine Hall of Fame.
19. In 1984, Don was elected to the Quarter Century Hall of Fame.

During the day of 26 May, 1985, Don Wallace "Memorial QSOs" were made from the ranch location of Don Wallace as well as on the local 2-meter net.

HOW THE NCDX FOUNDATION BEGAN

A History Lesson by W6ISQ

On a warm summer evening in 1972, four amateurs met in a small apartment above the kitchen of a Chinese restaurant in Chinatown, San Francisco, USA. This was Vince Chinn's (K6KQN) home, where he had lived all his life. It was Vince, a Certified Public Accountant, who conceived the notion that there may be a few hams in the San Francisco Bay Area who would like to contribute to a US tax-exempt amateur foundation which would support and equip overseas amateurs, DXpeditions and, particularly, technical or scientific innovations in the amateur service.

I was last to arrive at the meeting. To get to the apartment was an interesting expedition in itself. Grant Avenue, the main street in Chinatown, on any summer evening, is packed with browsing tourists mingling with the local Chinese residents getting a little air and shopping for exotic foods (to my palate) in the Chinese grocery stores. I made my way very slowly down several crowded blocks of Grant Avenue, then turned off and went past two Chinese restaurants, then turned down a very dark walkway, separating two buildings, about as wide as one person. Sixty feet down the walk, at the far end, I could see the silhouettes of two men sitting on boxes and smoking in a kitchen doorway. Ahhh, I remembered that kitchen from the time I had been there in the daytime. I was in the correct walkway. Thank goodness for the light from the kitchen or I would not be sure.

I reached the kitchen door and drew disinterested looks from what appeared to be the dishwashers taking a rest on the boxes. I turned immediately to the right and climbed a flight of concrete stairs. On the landing, I made out the name "Chinn" - the only name there - in the weak reflected light and pushed the button. The door opened and there was smiling Vince. "Ya found it", he said.

I entered and again marveled at Vince's wall-to-wall hi-fi equipment and attractive decor of the windowless living room.

At a table in the center of the room were two others. One of them spoke.

"It's about time. Where the hell ya been?" That was from Don Schliesser, W6MAV (now K6RV). That was about as nice a greeting as I ever got from Don; so, encouraged, I spoke of the interesting walk through Chinatown on a warm summer night.

"Yeah," said Don.

"Hello, Jack." That was from Lee Shaklee, W6BH. Lee was always polite and gentlemanly and added decorum to any assembly. I sat down at the table.

"OK," said Vince, "I've told you my reasons and ideas about starting a Foundation, and its objectives. Do you think there are any local amateurs who might be interested in participating?"

"Sure," said Don. "We ought to have a Foundation."

"Agreed," said Lee. I was out of breath from climbing the stairs.

"Then you all agree we should form a Foundation along the lines I outlined?" asked Vince.

"Yes--yes--yes."

"OK, we have a Foundation. I'll draw up the papers and make all proper applications to the State of California and Internal Revenue Service, etc."

"Good--Good--Good."

"What shall we name it?" asked Vince.

"Well, it's a DX-oriented Foundation and we are in the San Francisco Bay Area."

"You think anyone outside this immediate San Francisco area would ever support it?"

"Don't know. But probably it will be mostly local Bay Area hams. At least that is all we can hope for."

"Oh, well, we don't want to sound too local; so why don't we make it sound real BIG! How about Northern California DX Foundation..half the whole state! Sound OK?"

"OK--OK--OK."

"We're going to need a President. Who wants to be president?"

Long silence.

"I nominate Shaklee," said Don in desperation.

"Second."

"All in favor..."

"Aye--Aye--Aye."

"I accept." Lee got up and walked over to the chair where he had draped his coat. He took out a checkbook and wrote a check for $1,000. Don got out his checkbook and wrote a check for $100. I fished a $10 bill out of my pocket and Vince dug deep into his wallet and snaked out a one dollar bill.

The Northern California DX Foundation was funded that warm summer night in Chinatown with $1,111.00. (It was some months later that Lee generously donated the seed capital in stock that still forms the principal NCDXF investment.)

"Who is going to do the work?"

"Yeah, we're going to need help."

"How about Merle, K6DC, to help with the paper and secretarial work. He's a hard worker."

"Good--Good--Good. We'll ask Merle if he will help."

"We need publicity. How about Cass? (Hugh Cassidy, WA6AUD, then publisher of the West Coast DX Bulletin.) Great. Let's ask if he will help."

"We need someone who knows about equipment. How about Bob Ferrero, K6AHV (now W6RJ), over at HRO? Good man. Let's ask if he will help."

"What about someone who can design cards and write press releases and brochures and things? How about Bud Bane W6WB? Good--Good--Good.

"We need a lot of new ideas. How about Jim Maxwell, W6CF? Good--Good--Good. We'll ask him."

In the ensuing months, those first hard-working people came together to form the first NCDXF Board. That is essentially how NCDXF began and how it got its name.

We have been criticized because the Northern California DX Foundation name seems to relate to this one small local spot in the country, whereas our membership is worldwide. The problem was that when we started we didn't expect that it would grow outside the San Francisco Bay Area, let alone expand all over Northern California. The growth has surprised us beyond our wildest dreams. We have been able to support more DX related and scientific activity than we originally thought possible.

It's true--we never imagined any of these wonders on that warm summer evening in 1972,

(continued on page 37)

AWARDS

SLOVAKIA AWARD

The DIPLOM SLOVENSKO is available to licensed amateurs for contacts with the okreses (counties) of the Slovak Republic (OK3). In the Slovak language, county = okres. There are 38 counties in Slovakia.

This Award is sponsored by the Amateur Radio Union of Slovakia and OK3-DX Club. The DIPLOM SLOVENSKO is issued for contacts all on HF(1,8-30 MHz), VHF(50 MHz -up), or via satellite, regardless of mode of operation. Award dimensions: 450 x 330 mm. Do not send QSL cards. Send application, GCR and 5 IRC to:

Award Manager
Jaromir Slezak OK3CAU
925 09 KOSUTY 27
CZECHOSLOVAKIA

Requirements:

HF Award
Stations in HA, OE, SP and UB must contact 35 counties.
Stations in other European countries must contact 20 counties.
Stations outside EU need 10 counties.

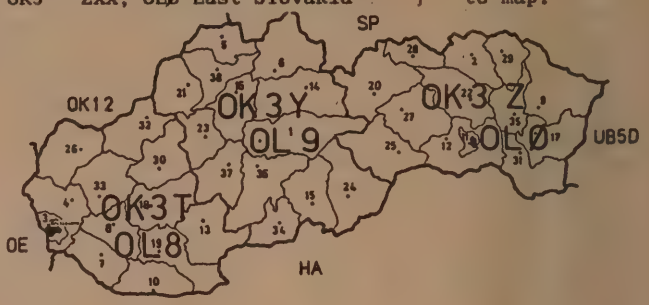
VHF Award European stations located up to 500 km from Slovak borders must contact 10 counties.
Other EU stations need 5 counties.
Stations outside EU need any 2 Slovak stations regardless county.

SATELLITE Award No different counties needed. EU stations must contact 10 Slovak stations.
Stations outside EU need 3 Slovak stations.

The names of Counties in the Slovak Republic are named after their respective County Towns.

1.	Banska Bystrica	19.	Nove Zamky
2.	Bardejov	20.	Poprad
3.	Bratislava MC	21.	Povazska Bystrica
4.	Bratislava DC	22.	Presov
5.	Cadca	23	Prievidza
6.	Dolny Kubin	24.	Rimavska Sobota
7.	Dunajska Streda	25.	Roznava
8.	Galanta	26.	Senica
9.	Humenne	27.	Spisska Nova Ves
10.	Komarno	28.	Stara Lubovna
11.	Kosice MC(mesto)	29.	Svidnik
12.	Kosice DC(vidiek)	30.	Topolcany
13.	Levice	31.	Trebisov
14.	Liptovsky Mikulas	32.	Trencin
15.	Lucenec	33.	Trnava
16.	Martin	34.	Velky Krtis
17.	Michalovce	35.	Vranov
18.	Nitra	36.	Zvolen
MC =	Metropolitan County	37.	Ziar nad Hronom
DC =	District County	38.	Zilina

OK3 Call-sign indentification : OK3 xx all counties.
OK3 Cxx all counties.
OK3 Kxx, Oxx, Rxx and some OK5 and OK7 are Club stations.
OK3 Txx, O18 West Slovakia } for county
OK3 Yxx, OL9 Central Slovakia } refer
OK3 Zxx, OLØ East Slovakia } to map.



WEST KENT ARS AWARD

The WKARS Award is available to licensed amateurs and S.W.L's (on a "Heard" basis) for confirmation of QSO's with W.K.A.R.S. members and also with other amateur radio stations within 20 km radius of Royal Tunbridge Wells. This radius encompasses parts of the Counties of Kent, East Sussex and Surrey. The major towns and villages within this radius are as follows:

Borough Green, Brasted, Brenchley, Burwash, Buxted, Chartwell, Cranbrook, Crowborough, Dormansland, East Grinstead, East Peckham, Edenbridge, Frant, Goudhurst, Hadlow, Hadlow Down, Hartfield, Hawkhurst, Heathfield, Hever, Hildenborough, Horsmoden, Hurst Green, Ide Hill, Ightham, Kemsing, Lamberhurst, Lingfield, Linton, Marden, Maresfield, Mayfield, Nutley, Paddock Wood. Penshust, Plaxtol, Rotherfield, Royal Tunbridge Wells, Sevenoaks, Shipbourne, Speldhurst, Staplehurst, Ticehurst, Tonbridge, Wadhurst, Wateringbury, Westerham, West Malling, Wrotham, Yalding.

To qualify for this Award U.K. amateurs must accumulate 20 points, others 10 points. Points per QSO are as follows:

QSO with present or past members of W.K.A.R.S. - 3 points

QSO with Club Station G1WKS, G3WKS, GBOWKS - 5 points (one call-sign only)

QSO with other stations within stated radius - 1 point

This Award is available for all CW, PHONE or MIXED modes either all H.F.(1,8-30 MHz, V.H.F.(50 MHz-up), or mixed bands. QSOs with mobile stations(/M) do not count. QSOs with portable stations (/P) are valid.

No QSL cards needed. Send list of contacts with the following data: Call-sign, QTH(non members only), date, UTC, frequency band, and class of emission used. U.K. applicants please enclose with you application a second class letter postage stamp. Others send 1 IRC.

Present and past member of the W.K.A.R.S. :

LAØDO ZS6M
G1 BGL FQK
G2 BT AOL
G3 AIO AMG FVV HCK HOU IOM KIP KOM LMS PEY RST TLB TXZ XPX YOU YPY ZYP ZZC
G4 BIA BKG BOO BWH CCQ CNE DFY DIX DRB DYF EMB ERW EUK FDC FGU FWG FYG GTN HUW IBQ IJH JFD JZP KIU MXL NAJ OSHOTV OYW PBF PML RPQ RWT SGI SLD UDW UPI XCZ ZIA XRN ZFP

G6 PS TQ BNJ DUU HVW JUB HFX RHU OOE KLG TBO TBY TKG TWF UJY
G8 KG CAA CDD CDP FFG GYB IJH IWP JXG KHF KNA KOA KPU KPZ KQJ KUV LGW LMV MLV MLZ NOB OFO ORZ PSS PWO RUX SAS UEH UFY UJM VMG VWG VWN WLH WZK XSC ZXC

Call-signs G1xxx, G6xxx are VHF only stations.

Apply to: G4FDC, Alexander Korda, 5 Windmill Court, North Street, Royal Tunbridge Wells, Kent, TN2 4SU, England, GB.

NATIONAL PARKS 100 AWARD

To help publicize the 100th Anniversary of Parks Canada, CRRL is sponsoring a National Parks 100 Award. The idea is to earn 100 points by working Canadian stations during this anniversary year. For Canadian stations, contacts with most Canadian stations count for 1 point; contacts with Canadian stations using special prefixes count for 5 points; contacts with Canadian stations operating from Parks Canada sites count for 10 points. For US and DX stations, points are doubled. To receive the award, send a copy of your log, certified by two other amateurs, to CRRL National Parks 100 Awards Manager, Garry Hammond, VE3XN, 5 McLaren Avenue, Listowel, ON N4W 3K1. Please include a donation of $1 or 3 IRCs to help pay for cost of printing and mailing the awards.

NATIONAL PARKS 100 AWARD

The National Parks 100 AWARD
is presented to
VE3XN — CARL BLAHALOVICH — ONTARIO —
in commemoration
of this station's communications
with Canadian amateur radio stations
during 1985,
the centennial year
for Canadian National Parks.
Dated at Listowel, Ontario
this August 1, 1985
On behalf of
The Canadian Radio Relay League
Amateur Operator, VE3XN
Amateur Director, CRRL
Garry V. Hammond
National Parks Centennial
1885—1985
100 years of Heritage Conservation
Canada's first national park was established in 1885 at Banff, Alberta. Today there are national parks and national historic parks in every province and territory. The National Parks Centennial is an occasion to renew our commitment to preserve examples of our heritage unimpaired for the benefit of all Canadians.
parks pour la conservation

****

THE DX BULLETIN
MOST NEEDED COUNTRIES SURVEY

1. ZA	11. XW	21. FR GL
2. 7O	12. A6	22. C9
3. 3Y	13. XU	23. 3CO
4. VU7A	14. S9	24. 5U
5. XV	15. A5	25. FR JDN
6. YA	16. SV/A	26. FR TR
7. 4W	17. 1S	27. VU7 LAC
8. XZ	18. VP8 SG	28. ET
9. 5A	19. ZS2M	29. BY
10. S2	20. VP8 SS	30. 3B6

If you are planning DXpedition or contest operation any of those places mentioned above will guarantee never ending pileups. (TDXB)

LIFE IN CHAD

Larry Strain, N7DF

In a recent letter to KCDXC President, WOJLC, N7DF reported some very interesting things about life in Chad. Most of the letter has been reprinted below:

"I have been on the air under a temporary operating permit from the Ministry of Information and the Ministry of Security, issued July 12 and good until October 11. It does not assign a call so I've been signing N7DF/TT8. Operation so far is from my hotel room with a 1/4 wave 20 Meter vertical attached to the balcony rail. August 1, I will move to a house in town and can put up a better antenna.

Propagation stateside has been all but non-existent. I've worked over 1000 Europeans (mostly 20 CW), several JA's, lots of really rare Africans, but only 8 U.S. stations.

Right now I'm working 12 to 14 hour days on the job, 6 days a week but should have a little more time free in the upcoming weeks.

I hope to get on 80 and 160 during September. Operation from STO is out. The border is closed and the U.S. Embassy here will not authorize travel due to the active fighting there. For that matter, Chad is in an official state of war and there is constant guerrilla activity about 150 miles south of here while Khadafi's troops occupy all of Chad north of the 16th parallel. (Libya and Pakistan are said to be mining uranium from some volcanos up there. I'm sure they only want it for peaceful purposes.)

Operation from any other spots are pretty well out. My work won't leave enough time for getting a license so TT8 will have to be it. It's a bit scary here. There is a machine gun nest about 50 feet away from my room and you have to have a travel permit to go out of N'Djamena. No picture taking is permitted without authorization from the Ministry of Security and I have only the 178th one issued. Even with it I've been arrested twice for taking pictures! You can imagine how low I keep the volume on the radio!!!

Oh well, that's life in N'Djamena. There is only one bullet hole through the window of my hotel room...so far." (KCDXC Newsletter)

Zdenek Novak, OK2ABU spent many hours designing and building this beautiful home brew setup. L. to r. are the linear amplifier, all band transceiver, VFO

KH6BZF PROPAGATION REPORT

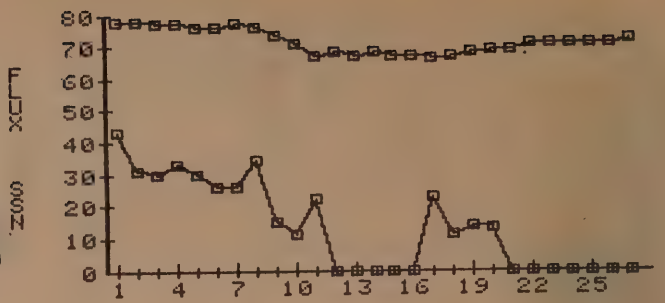
Lee Wical, KH6BZF

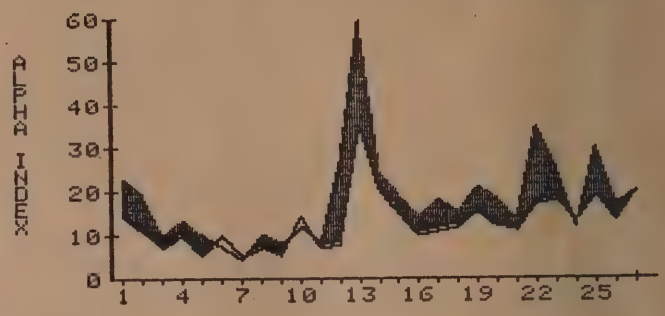
Statistical information is compiled by KH6BZF and processed on a computer by VE3BMV.

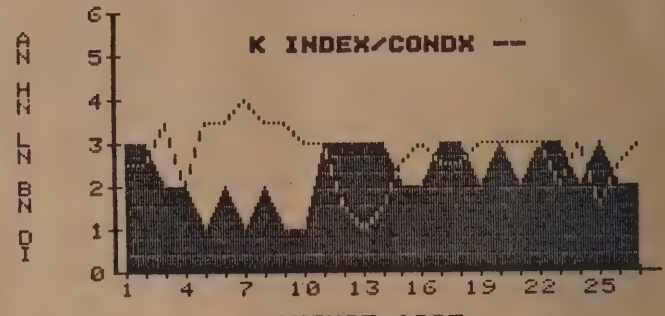
The first diagram shows the value of solar flux (top curve) and SSN - sunspot number (bottom curve). The X axis and scale is the same for both. The Y - axis is calibrated in days of the month.

The second diagram shows variation of the Alpha Index for each day. The dark shaded area shows increases, while the white area shows decreases in the value of the Alpha Index for each day.

The third diagram shows the value of the K Index (shaded area) on a scale from 0 to 6. The dotted line represents the propagation quality where the scale is: from 5 = Above Normal to 1 = Disturbed.







AUGUST 1985

FORECAST:

BEST HF CONDX: SEP: 20-21, OCT: 05-06
BEST VHF CONDX: SEP: 22-27, 29-30, OCT: 01-04

AUG '85	CONDX	SOL FLUX LEVEL	SSN#	GEOMAGNETIC LEVEL	ALPHA INDEX	K INDX	NOTES
01	LN-BN	078 VY LOW	43	UNSETTLED-ACTIVE	14/23	#K=3	RGN 4680(17) 4682(6)
02	LN-BN	078 VY LOW	31	ACTIVE-UNSETTLED	11/19	K=3	RGN 4680(6) 4682(5)
03	HN-LN	077 VY LOW	30	UNSETTLED-QUIET	07/10	K=2	RGN 4680(4) 4682(5)
04	LN	077 VY LOW	33	UNSETTLED	10/13	K=2	RGN 4680(7) 4682(6)
05	HN-LN	076 VY LOW	30	UNSETTLED-ACTIVE	05/10	K=1	RGN 4680(5) 4682(5)
06	HN-LN	076 VY LOW	26	UNSETTLED-QUIET	10/07	K=2	RGN 4682(3) 4685(3)
07	HN	077 VY LOW	26	QUIET	05/04	K=1	RGN 4682(4) 4686(2)
08	HN-LN	076 VY LOW	34	QUIET-UNSETTLED	07/10	K=2	RGN 4682(2) 4687(1) 4688(1)
09	HN-LN	073 VY LOW	15	QUIET	05/08	K=2	RGN 4687(5) 4688(1)
10	LN	071 VY LOW	11	UNSETTLED-ACTIVE	14/12	K=2	RGN 4687(1)
11	LN	067 VY LOW	22	UNSETTLED	07/08	K=3	RGN 4687(1)
12	LN-DIS	068 VY LOW	0	UNSETTLED-ACTIVE	08/27	K=3	K=5 @ 1900Z CORONAL HOD
13	DIS	067 VY LOW	0	MINOR-M.S.LEVELS	35/60	K=3	STORM @ 12/1930 13/1500 hrs.
14	DIS-LN	068 VY LOW	0	MAJOR STORM-ACTIVE	20/24	K=3	STORMY
15	LN-BN	067 VY LOW	0	ACTIVE-UNSETTLED	15/19	K=2	
16	LN	067 VY LOW	0	UNSETTLED-ACTIVE	10/14	K=2	
17	LN-BN	066 VY LOW	23	UNSETTLED-ACTIVE	11/18	K=3	RGN 4690(1) 4689(2)
18	LN-BN	067 VY LOW	11	UNSETTLED	12/15	K=3	RGN 4689(1)
19	LN	068 VY LOW	14	UNSETTLED-M.S.LEVELS	15/21	K=2	RGN 4690(4)
20	LN	069 VY LOW	13	QUIET-UNSETTLED	12/18	K=3	RGN 4690(3)
21	LN	069 VY LOW	0	UNSETTLED-ACTIVE	11/13	K=2	
22	LN	071 VY LOW	0	ACTIVE	17/35	K=3	
23	BN	071 VY LOW	0	ACTIVE-UNSETTLED	18/25	K=3	
24	LN	071 VY LOW	0	UNSETTLED-ACTIVE	13/12	K=2	
25	BN-DIS	071 VY LOW	0	ACTIVE-MINOR STORM	19/30	K=3	K=5 @ 06-0900 STORMY Disappearing Filament Suspected
26	LN-BN	071 VY LOW	0	ACTIVE-QUIET	13/17	K=2	
27	N	072 VY LOW	0	ACTIVE	20/--	K=2	
28							
29							
30							

CONTEST RULES

FRANK ANZALONE, W1WY
CQ Magazine

Calendar of Events

*	Oct.	5-6	California QSO Party
	Oct.	5-6	Ibero-American SSB Contest
	Oct.	5-6	ARRL CW QSO Party
	Oct.	5-6	VK/ZL/Oceania SSB Contest
	Oct.	5-7	Kansas State QSO Party
*	Oct.	6-7	Illinois QSO Party
	Oct.	12-13	VK/ZL/Oceania CW Contest
	Oct.	12-13	Pennsylvania QSO Party
	Oct.	12-13	ARCI QRP CW Contest
	Oct.	12-13	ARRL Phone QSO Party
	Oct.	13	RSGB 21/28 MHz Phone
	Oct.	16-17	YLRL Anniv. CW Party
	Oct.	19-20	Boy Scouts Jamboree
	Oct.	19-21	Rhode Island QSO Party
	Oct.	20	RSGB 21 MHz CW Contest
	Oct.	26-27	CQ WW DX Phone Contest
	Oct.	30-31	YLRL Anniv. SSB Party
	Nov.	2-3	IPA Radio Club Contest
	Nov.	2-4	ARRL CW Sweepstakes
	Nov.	9-10	European RTTY Contest
	Nov.	9-10	Silver Jubilee "Electril"
	Nov.	16-18	ARRL Phone Sweepstakes
	Nov.	23-24	CQ WW DX CW Contest
	Dec.	7-9	ARRL 160 Meter Contest
	Dec.	14-15	ARRL 10 Meter Contest

* *Covered last month.*

Ibero-American SSB DX Contest

2000Z Sat. to 2000Z Sun., Oct. 5–6

Organized by the URE of the "Valles Oriental" section, this contest commemorates the "Hispanidad," which is celebrated on October 12th.

Single operator only, on all 6 bands, 10 to 160 meters.

Exchange: RS plus a QSO number starting with 001.

Points: Between Ibero-American stations 3 points per QSO, non-Ibero stations 1 point. A station may be worked once on each band for QSO and multiplier credit.

Multiplier: Each Ibero-American station worked on each band: CE, CO, CP, CR, CT, CX, C3, C9, DU, EA, HC, HI, HK, HP, HT, KP4, LU, OA, PY, TG, TI, XE, YS, YV, ZP, 3C, and DXCC Dependences.

Score: Total QSO points times the Ibero-American multiplier from each band.

Awards: A plaque will be issued to the champion outside the Ibero-American area, and to the high scores in each continent and DXCC countries. A minimum of 4 hours and 75 QSO's must be worked to be eligible for the awards.

There is an SWL section with the same scoring conditions. A special plaque will be awarded to the winner who has participated 5 or more years.

All entries must be postmarked no later than November 30th and go to: Delegacion Comarcal URE Valles Oriental, P.O. Box 262, Granollers (Barcelona), Spain.

Kansas State QSO Party

0100Z to 0700Z Sat., Oct. 5
1300Z Sat. to 0700Z Sun., Oct. 5–6
1300Z Sun. to 0100Z Mon., Oct. 6–7

This is the fourth annual QSO Party sponsored by the Boeing Employees' ARS of Wichita, Kansas.

The same station may be worked on each band and each mode, for contact points, and more than once if they are additional multipliers. Kansas can work in-state stations for QSO and multiplier credit.

Exchange: QSO no., RS(T), and QTH. County for Kansas; state, province, or country for others.

Scoring: Two points for phone QSOs, three points if on CW. Kansas stations multiply total QSO points by the sum of different states, VE provinces, and DX countries worked.

Others will use sum of different Kansas counties worked for their multiplier (counted once only, maximum of 105). There is also a bonus multiplier of one for each group of 8 QSOs with the same Kansas county.

Frequencies: CW—1805, 3560, 7060, 14060, 21060, 28160. SSB—1815, 3925, 7260, 14280, 21380, 28580. Novice—3725, 7125, 21150, 28160.

Awards: Certificates to the top-scoring station, both single and multi-operator, in each state, VE province, DX country, and Kansas county. Work five club members and you will be eligible for the worked five Kansas Bears Award.

Include a summary sheet and a dupe sheet if your log shows more than 200 contacts. The usual signed declaration is also required. Logs and summary sheets are available; include a large SASE with your request to the address below.

Mailing deadline for all entries is November 12th to: Boeing Employees' A.R.S., c/o Mike Thornton, WA0TAH, P.O. Box 16534, Wichita, KS 67216.

ARRL QSO Party

C.W.: Oct. 5–6 Phone: Oct. 12–13
1800Z Saturday to 0600Z Sunday

This event is similar to the annual Open CD Party, which has been phased out, and it is open to *all* ARRL members. Operate a maximum of 10 hours out of the 12-hour period. Off times must be at least 30 minutes and must be clearly indicated in the log.

Exchange: Your "status" and ARRL section (MBR member, ORS official relay station, etc.).

Scoring: Total QSO's from all bands times number of ARRL sections worked (maximum of 74). Phone and CW are separate and require separate logs. A dupe sheet is also required if you make more than 200 contacts.

Referring you to a current issue of *QST* for more details is academic, since all members of course receive *QST*. Anyway, be sure to get your entry to the ARRL, 225 Main Street, Newington, CT 06111 within a month of the above dates.

VK/ZL/Oceania DX Contest

SSB: Oct. 5–6 CW: Oct. 12–13
1000Z Saturday to 1000Z Sunday

There have been some small modifications in the rules of this year's old-time contest. This year it commemorates the 75th anniversary of the Wireless Institute

of Australia and the 50th year of the VK/ZL contest.

Following rules are for stations other than VK/ZL. Oceania stations can work anyone. The rest of the world work VK, ZL, and Oceania stations only. The same station may be contacted on each band for QSO and multiplier credit (no WARC bands).

Exchange: RS(T) plus a three-figure QSO number starting with 001.

Scoring: Same for everybody, 2 points per QSO.

Multiplier: Each VK/ZL and Oceania prefix worked on each band.

Final Score: Total QSO points from all bands times the sum of the prefix multiplier from each band.

Awards: This year there will be awards to the top scorers in each continent. These will be in the form of leather-bound log books, and medallions to the top scorers in countries that submit 10 or more entries. Certificate awards will be made at the discretion of the contest manager.

There is an SWL section. Only VK, ZL, or Oceania stations are reported. Call of station being worked and RS(T) being sent and received must be reported. Scoring same as above, but SSB and CW scores are combined for final score.

Include a summary sheet showing the scoring, use separate log sheets for each band, and include the usual signed declaration that all rules and regulations have been observed.

This year they go to: W.I.A. VK/ZL/O Contest Manager, 1 Noorabil Court, Greensborough, Vic. 3088, Australia. All entries must be received no later than January 31, 1986.

ARCI QRP CW Contest

1200Z Sat. to 2400Z Sun., Oct. 12–13

This is the fall edition and 24th anniversary of the QRP Amateur Radio Club International. This year's activity will be found on CW only. Participants may operate the full 24 hours.

Exchange: RS(T) and state, province, or country. Members will include their number; non-members their power output.

Scoring: Contacts with members, 5 points. Non-members, 2 points if in same continent, 4 points if in a different continent. The same station may be worked on each band for QSO and multiplier credit.

There is a power output bonus: 4 to 5 watts—× 2; 3 to 4 watts—× 4; 2 to 3 watts—× 6; 1 to 2 watts—× 8; less than 1 watt—× 10; over 5 watts check log only.

The following bonus multipliers are also available: solar or wind power—× 2; battery power—× 1.5. Must be used for duration of contest.

Multiplier: Each state, VE province, and DX country worked on each band.

Final Score: Total QSO points from all bands × (states + provinces + countries) × power bonus × power type if any.

Frequencies: 1810, 3560, 7040, 14060, 21060, 28060, 50360. Novice—3710, 7110, 21110, 28110.

Awards: Certificates to the highest scorers in each state, province, and DX country with two or more entries. All entries will be considered for the Triple Crown QRP Award. In addition, Adrian Weiss, W0RSP, is sponsoring a special *Milliwatt* certificate to be awarded to the top-scoring station in the less than 1 watt category, providing there are two or more entries in that category.

Use a separate log sheet for each band. Include a summary sheet showing the scoring, equipment description, and other essential information. Include a large SASE for a copy of the results. It is suggested you send a large SASE to KA5NLY for official log forms.

Logs must be received by November 13th and go to: QRP ARCI Chairman, Gene Smith, KA5NLY, P.O. Box 55010, Little Rock, AR 72225.

Pennsylvania QSO Party

1600–0500Z Sat.–Sun., Oct. 12–13
1300–2200Z Sun., Oct. 13

This is the 28th annual party sponsored by the Nittany A.R.C. of State College, Pennsylvania. The same station may be worked on each band and mode for QSO points. PA stations may also work other PA stations for QSO and multiplier credit. Mobiles may be worked in each county change.

Exchange: RS(T), three-digit QSO number, and QTH. County for PA, ARRL section for others.

Scoring: One point for SSB contacts, 1.5 points for CW, 2 points for CW on 80 and 160.

PA stations multiply total by ARRL sections + PA counties + 1 DX country worked. Others use PA counties for their multiplier (maximum of 67).

Mobiles add 500 bonus points for each county operated from, minimum of 10 QSOs. Mobiles on county lines give one QSO number but get credit for two multipliers.

Frequencies: CW—1810 and 40 kHz up from bottom edge of each CW band. SSB—1850, 3980, 7280, 14280, 21380, 28580. Novice—10 up from bottom of each Novice band. Mobile—5 kHz below listed frequencies. Try 160 at 0300Z.

Awards: Will be made in five classes—single operator, multi-single, multi-multi, mobile, and QRP (maximum 5 watts). Certificates to winners in each county, each section, and club (minimum of 3 members and 20 QSOs). Plaques to top scorers in both eastern and western PA, out-of-state, both multi's, mobile, western USA, and QRP *(quite a selection—ed.)*.

Include a summary sheet with your entry showing the scoring, a check list of counties or sections worked, and a dupe sheet if you make 100 or more contacts. There is a severe penalty of 100 points deducted for each dupe that has not been removed.

Official log forms are recommended and are available from W3HDH. For a copy of the results send 50¢ (no SASE).

Mailing deadline for entries is November 15th to: Douglas R. Maddox, W3HDH, 1187 S. Garner Street, State College, PA 16801.

YLRL Anniversary Party

C.W.: Oct. 16–17 Phone: Oct. 30–31
1800Z–1800Z Wed.–Thurs.

This is the 46th annual party run by the YL Radio League. It is open to all YL's around the world, and activity is between YL's only on all bands, 3.5 through 28 MHz. Phone and CW are separate contests and require separate logs and awards.

Exchange: QSO no., RS(T), and ARRL section. DX stations will indicate their country.

Scoring: One point per QSO between stations within an ARRL section and between DX stations. Two points if the QSO is between a DX station and an ARRL section station. The same station may be worked *once only* regardless of the band.

Multiplier: Is figured from the number of ARRL sections and DX countries worked. There is also a low power multiplier of 1.25 if power input is 150 watts or less on CW, 300 watts PEP on SSB.

Final Score: Total QSO points from all bands times the ARRL sections and DX countries worked times the power multiplier.

For each duplicate contact that is removed from the log in the course of checking, a penalty of three additional and equal contacts will be exacted.

Frequencies: CW—3555, 7055, 14055, 21195, 28195. SSB—3955, 7255, 14295, 21395, 28595. (Plus or minus 15 kHz.).

Awards: Gold cups to the top scorers in each contest. A plaque to the highest combined phone/CW score, and the Corcoran and Hagen memorial plaques. Certificates to the first, second, and third place overall winners and in each U.S. and VE call area and DX country. Only YLRL members are eligible for the cup

and plaques.

Logs must be received no later than December 10, and this year go to: Marty Silver, NY4H, 3118 Eton Road, Raleigh, NC 27608.

RSGB 21/28 MHz Phone Contest

0700 to 1900 GMT Sunday, Oct. 13

It's the world working the British Isles on 21 and 28 MHz.

The same station may be worked on each band for QSO and multiplier credit. There are a total of 42 prefixes available on each band. Following are the rules for areas other than the British Isles.

Sections: Single operator and multi-operator, both bands only, and SWL.

Exchange: RS report plus a progressive QSO number starting with 001.

Scoring: Each contact with a B.I. station is worth 3 points. Multiply total QSO points from each band by the sum of B.I. prefixes worked on each band (maximum of 42 per band). The GB prefix does not count for QSO or multiplier.

Unmarked duplicate contacts will be penalized 10 times the points claimed. Logs containing more than 5 unmarked duplicates will be disqualified.

There is also an SWL section. Only B.I. stations are to be logged. Scoring is the same as indicated above. The same call sign may appear once only in every three contacts, except when the logged station is a new multiplier.

Awards: Overseas stations will be awarded certificates to the leading station in each country and the leading station in the multi-operator section, and to the SWL winner in each country. The first, second, and third overall winners will also receive certificates of merit.

Separate log sheets are required for each band. Include a summary sheet showing the scoring, prefixes worked, and a signed declaration that rules and regulations have been observed.

Logs must be received by December 3rd. This year they go to: RSGB HF Contests Committee, c/o M. Harrington, 123 Clensham Lane, Sutton, Surrey SM1 2ND, England.

Rhode Island QSO Party

1700Z Sat. to 0500Z Sun., Oct. 19–20
1300Z Sun. to 0100Z Mon., Oct. 20–21

This one is again being sponsored by the East Bay AWA (WA1YPN). The same station may be worked on each band and each mode. RI stations may contact other RI stations for QSO points.

Exchange: RS(T) and QTH. City or town for RI; state, province, or DX country for others.

Scoring: Phone QSOs are worth 2 points, CW 3 points, and Novice/Tech. 5 points.

RI stations multiply total QSO points by the number of states, VE provinces, and DX countries worked. Others by the different RI cities and towns worked for their final score (39 cities and towns).

Frequencies: CW—1810, 3550, 3710, 7050, 7110, 14060, 21050, 21110, 28050, 28110. Phone—3900, 7250, 14300, 21360, 28600, 50110, 144.2 and 146.52. (Use of FM simplex is encouraged. No repeaters.)

Awards: Certificates to the top-scoring single operator station in each RI county, and each state, province, and country. The top-scoring Novice/Tech. in RI and out of state will also be rewarded, as will the winning RI multi-operator station.

Include a summary sheet with your entry showing the scoring and other essential information, and an SASE for a copy of the results.

Mailing deadline is November 30th to: East Bay AWA Inc., P.O. Box 392, Warren, RI 02885.

RSGB 21 MHz CW Contest

0700 to 1900 GMT Sunday, Oct. 20

Like the 21/28 MHz Phone Contest, the activity in this one is between the British Isles and the rest of the world. Competition is limited to single operator stations only. There is a separate QRP section in which power input must not exceed 10 watts, and there is also an SWL section.

The following rules are for areas other than the British Isles.

Exchange: RST report plus a progressive QSO number starting with 001.

Scoring: Each contact with a B.I. station is worth three points. Multiply total QSO points by the number of B.I. prefixes worked (G2, G3, GD3, etc.). A maximum of 42 is possible. (GB does not count for QSO or multiplier.)

Unmarked duplicate contacts for which credit has been taken will be penalized ten times the points claimed. Logs containing more than five unmarked duplicates will be disqualified.

Only British Isles stations are to be logged by overseas SWL's. The same call may be reported only once in every three contacts, unless the logged station is a new multiplier. Scoring is the same as above.

Awards: Certificates to the three leading stations in each overseas country, both transmitting and SWL.

Include a summary sheet with a list of prefixes worked, station description, the usual signed declaration, and your name and address in block letters.

Logs must be received by December 31st. This year they go to: RSGB HF Contests Comm., c/o J. Bazley, G3HCT, "Brooklands" Ullenhall, Solihull, Warks. B95 5NW, England.

CQ World-Wide DX Contest

Phone: Oct. 26–27 CW: Nov. 23–24
0000Z Saturday to 2400Z Sunday

You are again reminded to study the disqualification clause. Penalties have been clearly defined for taking credit for duplicate contacts. You may not only risk a deduction in your score, but also possible disqualification, especially if you were cited in last year's contest.

There are other items that might lead to being disqualified—sportmanship and regulation violations. Reading the comments in the phone results last month (USA QRM item) would indicate that there are areas for improvement. The Contest Committee is cognizant of the fact and will be watching those areas in this year's contest.

Note: The double asterisk (**) at the bottom of the rules page should read "Except the Gordon Marshall, W6RR African Award."

Again this year all logs must be sent directly to: CQ World-Wide DX Contest, 76 North Broadway, Hicksville, NY 11801 U.S.A. Be sure to indicate Phone or CW on the envelope.

Scouts Jamboree On The Air

Starts: 0001 Local Time Sat., Oct. 19
Ends: 2359 Local Time Sun., Oct. 20

This is the 28th annual Jamboree sponsored by the World Bureau of Scouts. Activity is world wide and includes not only Scout units, but Girl Scouts and Guides, too. This is not a contest, but an opportunity for Scouts or anyone interested in Scouting to get together on the air and exchange greetings. Amateurs can invite members of Scout units or individuals to visit their stations or clubs and see how ham radio operates.

No specific exchange, no scoring, and no logs are required. However, participating post-card-size certificates issued by the World Scout Bureau are available. They may be requested before the JOTA weekend for distribution and included with your QSL's of JOTA contacts. Send a large s.a.s.e. to: Jamboree on the Air, 1325 Walnut Hill, Irving, TX 75062; 22¢ postage for 10 cards, 17¢ for each additional 8.

Suggest you write to W2GND for additional details. Stateside participants send reports to Harry A. Harchar, W2GND, 216 Maxwell Ave., Hightstown, NJ 08520.

Announcing:

The 1985 CQ World-Wide DX Contest

Phone: October 26-27 & C.W.: November 24-25
Starts 0000 GMT Saturday Ends 2400 GMT Sunday

I. OBJECTIVE: For amateurs around the world to contact other amateurs in as many zones and countries as possible.
II. BANDS: All bands, 1.8 through 28 MHz.
III. TYPE OF COMPETITION:

1. Single Operator (single band and all band). Single operator stations are those at which one person performs all of the operating, logging, and spotting functions. The use of DX spotting nets or any other form of DX alerting assistance places the station in the Multi-Operator category.

2. Multi-Operator (all band operation only).

a. Single Transmitter, only one transmitter and one band permitted during the same time period (defined as 10 minutes). *Exception:* One—and only one—other band may be used during the same time period if—and only if—the station worked is a new multiplier. *Logs found in violation of the ten-minute rule will be automatically reclassified as multi-multi to reflect their actual status.*

b. Multi-Transmitter (no limit to transmitters but only one signal per band permitted).

c. *All transmitters must be located within a 500 meter diameter or within the property limits of the station licensee's address, whichever is greater. The antennas must be physically connected by wires to the transmitter.*

3. QRPp (single operator only). Power must not exceed 5 watts output. Stations in this category will be competing only with other QRPp stations for awards.

4. Team Contesting. A team consists of any five radio amateurs operating in the single operator category. A person can be on only one team per mode. A team **must operate** from two continents. Competing on a team will not prevent any team member from submitting his personal score for a radio club. A team score will be the sum of all the team member scores. S.S.B. and C.W. teams are totally separate. That is, a member of an S.S.B. team can be on a totally different C.W. team. A list of a team's members must be received by October 15 for S.S.B. and November 15 for C.W. Send the list to *CQ*, Att: Team Contest, 76 North Broadway, Hicksville, NY 11801 U.S.A. Awards will be given to the top five teams. A list of a team's members' scores plus the total team score must be submitted to *CQ* by the normal contest log deadlines.

IV. NUMBER EXCHANGE: Phone: RS report plus zone (i.e., 5705). C.W.: RST report plus zone (i.e., 57905).

A station in a zone or country different than that indicated by its call sign is required to sign portable.

V. MULTIPLIER: Two types of multiplier will be used.

1. A multiplier of one (1) for each different zone contacted on each band.

2. A multiplier of one (1) for each different country contacted on each band.

Stations are permitted to contact their own country and zone for multiplier credit. The *CQ* Zone Map, DXCC country list, WAE country list, and WAC boundaries are standards.

VI. POINTS: 1. Contacts between stations on different continents are worth three (3) points.

2. Contacts between stations on the same continent but different countries, one (1) point. *Exception:* For North American stations *only*, contacts between stations within the North American boundaries count two (2) points.

3. Contacts between stations in the same country are permitted for zone or country multiplier credit but have zero (0) point value.

VII. SCORING: All stations: the final score is the result of the total QSO points multiplied by the sum of your zone and country multiplier.

Example: 1000 QSO points × 100 multiplier (30 Zones + 70 Countries) = 100,000 (final score).

VIII. AWARDS: First place certificates will be awarded in each category listed under Sec. III in every participating country and in each call area of the United States, Canada, Asiatic USSR, and Japan.

All scores will be published. To be eligible for an award, a Single Operator station must show a minimum of 12 hours of operation. Multi-operator stations must operate a minimum of 24 hours. A single-band log is eligible for a single-band award *only*. If a log contains more than one band it will be judged as an all-band entry, unless specified otherwise.

In countries or sections where the returns justify, 2nd and 3rd place awards will be made.

All certificates and plaques will be issued to the licensee of the station used.

IX. TROPHIES & PLAQUES (Donors)

PHONE

Single Operator, All Band
World - Dave Rosen, K2GM - WA2RAU Memorial
World - QRPp - Adrian Weiss, K8EEG/Ø
U.S.A. - Potomac Valley Radio Club
*Canada - Jack Baldwin, VE7RG
Carib./C.A. - Alex M. Kasevich, VP2MM
Europe - Thomas J. Peruzzi, Jr., W4BVV
Africa - Gordon Marshall, W6RR
*Asia - Japan CQ Magazine
*Japan - Japan Crazy Contesters Club
Oceania - No. California DX Club
S. America - David Novoa, KP4AM

Single Operator, Single Band
World - North Jersey DX Assn., K2HLB Memorial
*World - 21 MHz - Lee Wical, KH6BZF
World - 3.8 MHz - Fred Capossela, K6SSS

U.S.A. - 28 MHz - Donald Thomas, N6DT
U.S.A. - 3.8 MHz - Arnold Tamchin, W2HCW
U.S.A. - So. California DX Club
*Canada - Gene Krehbiel, VE7KB
Carib./C.A. - Pedro Piza, Jr., NP4A - KP4ES Memorial
Europe - 28 MHz Zone 14 - A. G. Anderson, GM3BCL
Japan - 21 MHz - DX Family Foundation

Multi-Operator, Single Transmitter
World - So. Calif. DX Club - W6AM Memorial
U.S.A. - Carolina DX Association
Europe - Box Cox, K3EST
*Canada - Calgary Amateur Radio Assn.

Multi-Operator, Multi-Transmitter
World - Radio Club Venezolano
U.S.A. - Dale Hoppe, K6UA
Europe - OH-DX-RING - OH2AM

Contest Expeditions
World - Single Opr. - Stuart Meyer, W2GHK
World - Multi-Opr. - The German CDXG & SDXG (DJ3NG & DJ4EI Memorial)

C.W.

Single Operator, All Band
World - Albert Kahn, K4FW - W2AB Memorial
World - QRPp - Gene Walsh, N2AA
U.S.A. - Frankford Radio Club
*Canada - Canadian DX Association
Carib./C.A. - Peter Munroe, WB1DQC
Europe - Edward Bissell, W3AU
Africa - Gordon Marshall, W6RR
*Asia - Japan CQ Magazine
*Japan - Japan Crazy Contesters Club
Oceania - Maui Amateur Radio Club
*So. Amer. - Venezuela DX Club - YV5AAZ Memorial

Single Operator, Single Band
World - North Jersey DX Assn. - W2JT Memorial
World - 3.5 MHz - Fred Capossela, K6SSS
World - 1.8 MHz - Chip Margelli, K7JA - KP4ES Memorial
U.S.A. - No. Illinois DX Association
*Canada - Canadian Amateur Radio Federation
Carib./C.A. - DX Club of Puerto Rico
Europe - Southern New England DX Club
Australia - 14 MHz - Jay Carr, W6FAY
*Japan - 21 MHz - DX Family Foundation

Multi-Operator, Single Transmitter
World - Anthony Susen, W3AOH
U.S.A. - Douglas Zwiebel, KR2Q

Multi-Operator, Multi-Transmitter
World - Hazard Reeves, K2GL
U.S.A. - James Rafferty, N6RJ
Europe - OH-DX-RING - OH2AM

Contest Expeditions
World - Single-Opr. - Yankee Clipper Contest Club
World - Multi-Opr. - Bill Schneider, K2TT

Special - Single Operator Awards
World - All Band - SSB/CW - John Knight, W6YY
World - Single Band SSB/CW - Yuri Blanarovich, VE3BMV
World - All Band - CW - Most QSOs - KV4AA Memorial. (From the 14270 kHz Group)
World - Club - SSB/CW - CQ Magazine

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*Trophy supplied by Donor.

Trophy winners may win the same trophy only once in a two-year period. In the event that the same station wins the same category in two consecutive years, a special *CQ* Magazine Championship plaque will be awarded the second year. The sponsored trophy in that category will then be awarded to the second-place finisher in that category if the returns justify the award.

A station winning a World Trophy will not be considered for a sub-area award. That Trophy will be awarded to the runner-up of that area.

The Canadian and Carib./C.A. awards are for residents *only*.

**A resident is defined as one living in that country with an established Post Office address.

X. CLUB COMPETITION:

1. The club must be a local group and not a national organization.

2. Participation is limited to members operating within a local geographic area defined as within a 275 km radius from center of club area (except for DXpeditions especially organized for operation in the contest).

3. To be listed, a minimum of 3 logs must be received from a club and an officer of the club must submit a list of participating members and their scores, both on phone and c.w.

XI. LOG INSTRUCTIONS:

1. All times must be in GMT.

2. All sent and received exchanges are to be logged.

3. Indicate zone and country multiplier only the FIRST TIME it is worked on each band.

4. Logs must be checked for duplicate contacts, correct QSO points and multipliers. Submitted logs must have duplicate contacts clearly shown. The *original* log may be requested by the Contest Committee if further cross-checking of the log is necessary.

5. Use a separate sheet for each band.

6. Each entry must be accompanied by a summary sheet showing all scoring information, category of competition, contestant's name and address in BLOCK LETTERS, and a signed declaration that all contest rules and regulations for amateur radio in the country of operation have been observed.

7. Sample log and summary sheets and zone maps are available from *CQ*. A *large* self-addressed envelope with sufficient postage or IRC's must accompany your request.

If official forms are not available, make up your own 80 contacts to the page on 8½" × 11" paper.

8. All entrants are required to submit cross-check sheets for each band on which 200 or more QSO's were made. All other entrants are encouraged to submit cross-check sheets.

9. Duplicate contact penalty: up to 1%—three (3) additional contacts removed; 1% to 3%—ten (10) additional contacts removed; over 3% is grounds for possible disqualification.

10. QRPp stations must indicate same on their summary sheets and state the actual maximum power output used, with a signed declaration.

XII. DISQUALIFICATION: Violation of amateur radio regulations in the country of the contestant, or the rules of the contest; unsportsmanlike conduct; taking credit for excessive duplicate contacts; unverifiable QSO's; or unverifiable multipliers will be deemed sufficient cause for disqualification. (Incorrectly logged calls will be counted as unverifiable contacts.)

An entrant whose log is deemed by the Committee to contain a large number of discrepancies may be disqualified from eligibility for an award, both as a participant operator or station, for one year. If an operator is disqualified a second time within 5 years, he will be ineligible for any *CQ* contest awards for 3 years.

Actions and decisions of the *CQ* Contest Committee are official and final.

XIII. DEADLINE: All entries must be postmarked NO LATER than December 1, 1985 for the Phone section and January 15, 1986 for the C.W. section. An extension may be given if requested. Indicate phone or c.w. on envelope.

Both phone and C.W. logs should be sent to *CQ* Magazine, 76 North Broadway, Hicksville, NY 11801.

**Trophy supplied by donor.

TOP SCORES

WORLD Single Op All Band		USA Single Op All Band	
PJ2FR	8,420,220	K1AR	2,662,116
P44A	7,814,839	K2VV	2,389,164
EX6F	6,362,000	K1DG	2,358,850
YV5TK	6,107,744	W1ZM	2,160,082
KJ9W/KH2	4,337,092	W3BGN	1,992,977
CN8ES	4,195,706	K2XA	1,971,549
6Y3M	3,615,344	W2RQ	1,807,491
FR0FLO	3,172,668	K1TO	1,799,548
CE3DNP	2,956,080	N2LT	1,670,514
ZP5JCY	2,873,404	W0ZV	1,666,281
		W7EJ	1,642,410

Single Op Single Band 28 MHz		Single Op Single Band 28 MHz	
CE6EZ	859,165	NU4Y	38,078
LU2FDR	589,572	WB7FDQ	26,496
LU1E	573,138	W8WPC	19,560
CX5AO	498,386	NG6W	12,031
CX4HS	326,616	AA4M/6	11,424
LU5MDO	261,250	KB8LM	10,664

21 MHz		21 MHz	
HC1OT	1,112,620	K2EK	498,648
KG6DX	1,080,576	K7JA	429,769
9Y4AT	697,125	N4UM	424,853
EA4LH/CE3	643,710	NO4J	406,120
I1KN	605,382	K6LY	272,150
YC0DPO	587,340	K1VUT	246,312

14 MHz		14 MHz	
K0GU/8R1	1,251,096	W2YV	640,640
5N24AMA	1,057,264	W7IL	391,035
LU6ETB	1,033,659	NB2P	315,972
CT2FH	887,656	KV4P	300,824
G3FXB	821,028	W6BH	282,321
KD7P/KH2	781,550	K2WK	255,860

7 MHz		7 MHz	
EA8AK	776,700	KJ9D	103,362
9Y4VU	700,488	KV0Q	55,610
T32AF	677,844	N8RA	43,935
XN3BMV	546,615	K1MM	41,912
XL1CV	391,629	N6ADI	38,000
I2VRN	309,672	K5NW	34,528

3.7 MHz		3.7 MHz	
YV3AZC	351,324	W6RJ	92,910
NE4G/6Y5	278,520	W0MJ/5	91,952
ZL1BIL	142,560	K1UO	89,200
HA8IE	117,819	WB2ITR	38,048
XN3EEW	103,870	N7DF/0	31,980
OH1RY	101,088	W9RN	31,244

1.8 MHz		1.8 MHz	
LZ2CJ	107,818	K5UR	11,600
HB9AMO	42,092	AA1K/3	10,258
I4JMY	28,969	AE6U	4,200
SP3IBS	28,892	KA1SR	3,510
IK0BYO	28,152	N4SU	3,360
YV2IF	18,291	KG7D	3,248

Multi-Op Single Transmitter		Multi-Op Single Transmitter	
4V2C	8,448,099	K2BU	2,791,019
LZ7A	7,243,456	N4CC	2,718,682
ED9CM	6,860,565	NA8V	2,677,584
KP4BZ	6,804,200	N4ZC	2,653,413
VP2MW	6,509,970	N4RJ	2,305,635
ED7BB	5,095,400	K4VX/0	2,283,966

Multi-Op Multi-Transmitter		Multi-Op Multi-Transmitter	
TI1C	22,157,695	N2AA	7,418,328
VP2VCW	17,842,662	W3LPL	6,402,844
VP9AD	16,794,200	W4DR	6,270,623
ZY5EG	13,342,416	N5AU	5,173,860
XE2SI	9,984,236	N6RZ	4,003,272
V2ARS	8,762,040	K0RF	3,576,748

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BAND-BY-BAND BREAKDOWN—TOP ALL BAND SCORES

Number groups indicate: QSO's/Zones/Countries on each band.

WORLD TOP SINGLE OPERATOR—ALL BAND

Station	160	80	40	20	15	10
PJ2FR	91/7/12	509/23/58	969/28/81	888/28/79	1767/28/86	1443/20/53
P44A	46/5/12	589/20/50	1222/30/84	917/28/82	1906/25/90	713/20/53
EX6F	87/5/20	467/23/46	1060/30/78	850/31/84	1873/26/88	216/18/35
YV5TK	19/8/10	518/22/59	792/27/69	708/30/83	1554/28/84	584/21/55
KJ9W/KH2	28/10/9	250/20/31	880/29/45	448/32/66	1721/32/82	591/22/25
CN8ES	14/3/10	194/12/44	473/17/67	773/29/93	1073/24/82	529/18/64
6Y3M	168/13/24	736/18/42	781/24/62	631/20/60	1381/23/82	623/14/32
FR0FLO	2/2/2	121/22/37	379/26/60	480/30/70	1288/24/85	328/13/49
CE3DNP	3/2/2	51/8/9	266/23/40	709/30/71	1045/21/63	895/21/49
ZP5JCY	10/5/6	40/14/17	449/29/56	646/30/86	930/23/55	544/19/42

WORLD TOP MULTI-OPERATOR SINGLE TRANSMITTER

4V2C	156/8/19	1117/24/71	1170/30/92	1404/32/107	2077/28/81	974/21/49
LZ7A	153/15/53	232/21/81	1024/32/102	1332/39/110	1406/36/114	195/25/76
ED9CM	103/11/36	261/14/51	528/19/82	1395/34/102	1450/28/98	313/20/75
VP2MW	210/8/12	916/19/65	1077/28/86	1345/30/98	1744/27/93	421/15/32
ED7BB	52/8/32	424/18/67	464/21/80	1214/32/94	1446/32/107	176/19/74
D44BC	155/12/29	325/15/41	494/25/80	779/27/85	1204/21/74	646/18/61

WORLD TOP MULTI-OPERATOR MULTI-TRANSMITTER

TI1C	440/13/23	1479/24/69	2475/35/96	3940/35/125	3714/34/126	1894/26/79
VP2VCW	869/19/51	1326/25/92	2042/28/99	3616/32/108	3338/27/94	1241/19/40
VP9AD	750/15/31	1580/22/67	1978/32/99	2899/34/120	3275/32/128	522/20/55
ZY5EG	15/5/7	206/18/33	1363/33/101	2204/39/135	2712/29/96	1272/24/76
XE2SI	236/7/8	1082/20/43	1938/30/65	2726/34/100	2259/32/86	711/20/48
V2ARS	248/14/24	1023/13/40	1829/26/90	1751/29/86	2109/24/89	1121/20/49

USA TOP SINGLE OPERATOR—ALL BAND

Station	160	80	40	20	15	10
K1AR	29/9/14	83/18/48	79/24/51	834/32/109	804/27/114	63/14/29
K2VV	34/11/19	87/15/42	86/21/49	1026/32/99	588/25/96	57/12/23
K1DG	22/9/15	100/20/54	117/25/64	665/31/101	683/27/106	73/12/30
W1ZM	21/8/11	135/23/62	87/23/51	658/28/93	613/26/105	55/15/33
W3BGN	24/7/13	107/22/57	120/23/55	676/28/89	537/28/96	56/12/27
K2XA	25/8/13	64/16/37	77/21/43	679/30/95	658/26/106	64/13/31
W2RQ	16/5/8	66/15/39	113/26/64	553/26/91	708/26/104	27/9/16
K1TO	18/7/12	65/13/37	85/24/51	574/26/90	629/28/98	76/15/32
N2LT	17/7/9	88/17/47	90/24/54	550/31/87	532/24/90	70/13/30
W0ZV	28/11/16	73/22/47	124/26/49	347/32/76	721/30/85	46/15/28

USA TOP MULTI-OPERATOR SINGLE TRANSMITTER

K2BU	32/11/19	140/23/72	181/26/62	853/35/100	587/28/113	74/17/35
N4CC	7/7/7	73/24/58	183/32/84	837/32/107	797/31/120	60/19/48
NA8V	23/9/15	84/20/58	153/31/75	881/37/110	533/30/109	64/15/37
N4ZC	13/8/12	136/24/69	140/32/82	490/33/116	697/32/126	79/19/56
N4RJ	33/14/23	116/25/72	146/30/71	497/34/126	513/31/120	74/20/49
K4VX/0	28/13/18	70/23/61	217/29/75	461/36/110	576/29/121	86/15/39

USA TOP MULTI-OPERATOR MULTI-TRANSMITTER

N2AA	80/15/25	509/31/100	498/34/102	1497/37/135	1049/29/137	124/19/48
W3LPL	70/12/23	435/26/84	381/33/105	1281/36/130	992/31/137	163/19/58
W4DR	62/13/23	374/26/81	442/33/104	1521/35/137	784/31/128	135/19/53
N5AU	55/13/23	208/26/65	413/33/82	1090/35/126	1081/31/121	221/24/57
N6RZ	51/11/15	150/23/46	357/25/51	712/34/96	1370/34/101	215/20/46
K0RF	42/10/16	254/24/61	353/30/71	829/35/111	717/31/103	130/18/48

1985 CQ WW WPX C.W. CONTEST
HIGH CLAIMED SCORES

The following scores are early-bird high claimed scores as of 28 July 1985. These are raw scores subject to verification.

U.S.A.

SINGLE OPERATOR
ALL BAND

KT3Y	3,161,018
KC1F	3,143,868
KQ2M	3,002,510
K1GQ	2,767,273
KI6P	2,684,710
K3ZO	2,406,624
NR5M	2,340,849
W3GM	1,809,900
K1XA	1,548,960
K5RX	1,482,984
K4JPD	1,452,816
K1VUT	1,403,116
KM9L	1,358,048
N6ICV	1,140,300
AJ6V	985,520
K7LXC	925,290
WA2OOS	887,698
WA6AUE	795,872
KM0L	753,753

28 MHz

KE5CV	5,566
NU4Y	5,467
W8AKS/6	288

21 MHz

KA5W	64,750
KS9J	11,616
N0BSH	8,094

14 MHz

N2AA	1,658,469
K2TW	1,324,430
AI7B	1,247,290
N1CQ	1,089,900
W5WMU	1,037,993
W5FO	854,104
N3BJ	852,202

7 MHz

N5RZ	1,754,664
KR2Q	1,555,910
K1MM	1,397,400
KZ2S	1,179,288
NI6W	1,043,526
KM3T/2	911,820
AA6XX	451,200

3.5 MHz

N2AU	120,990
NE6I	52,628
KJ9D	27,178
WB6JMS	25,020
K3TW	19,680
NV6O/2	2,236

1.8 MHz

K5UR	13,668
KA1SR	884

MULTI OPERATOR
SINGLE TRANSMITTER

NA5R	3,919,662
AI6V	2,781,341
WC4E	2,510,224
N7TT	2,357,161
KU2C	2,172,942
AK6A	1,891,998
NU6S	1,740,409
NI8V	1,710,308
WC6I	1,472,472
AK6T	1,010,322

MULTI TRANSMITTER

NM5M	4,325,412
K6XO	504,144

QRP/p

KA2AEV	A	232,349
W8VSK	A	162,150
KB7G	14	54,284
AA2U	7	57,814

DX

SINGLE OPERATOR
ALL BAND

YZ4GD	3,870,272
5Z4MX	2,922,318
OK1RI	2,660,690
DF9ZP	2,014,956
IK2DVG	2,014,880
6Y6A	1,756,800
VE3CRG	1,638,226
KG6DX	1,562,160
CE3DNP	1,492,705
OH6LI	1,423,800
AH6AZ	1,279,047
HB9CSA	1,159,640
OH2PM	1,107,447
JH1OGC	1,096,077
JE6MQW	910,316
VK2APK	902,598
OK3ZMV	888,336
VE3DZV	817,544
EG7TH	740,885
HP1XKR	704,245

28 MHz

YO3KWJ	96,882
4M7QP	15,972
OH2EJ	12,610
SM0COP	10,191
SM5DUT	8,988

21 MHz

YT3L	515,619
G4CNY	343,226
JA1ZLO	107,334
EI1DP	80,029
JW0EQ	63,525

14 MHz

YX5A	3,042,480
JA0DAI	1,109,745
VE6CB	1,035,386
OH3KM	807,311
YU7BJ	714,560
JH1AEP	709,198

7 MHz

YZ9A	1,920,960
T32AF	1,255,918
OH2BH	1,253,600
OH6EI	1,122,590
YT3T	971,520
JA5BJC	736,764
DK2OY	600,320

3.5 MHz

I4IND	526,812
YU1ZZ	341,205
VE3BMV	313,838
CF7SK	226,080
VE1AIH	92,964
OH2BCI/OH0	77,616

1.8 MHz

LA7JO	25,748
VE3MFA	23,302
VE3INQ	22,272
VE3OME	19,872
PA3BFM	6,192

MULTI OPERATOR
SINGLE TRANSMITTER

HH2WW	5,062,500
GB2MM	3,562,503
IO3FIY	2,942,294
JA3YBF	2,607,084
OH1AF	2,507,490
OG3AA	2,459,200
IO2UIY	2,445,232
JE2YRD	2,161,072
7S7SSA	2,031,928
8J7ITU	1,600,902

MULTI TRANSMITTER

KH6XX	8,564,616
KL7Y	6,486,053

QRP/p

YU7RU	A	236,106
4X6IF	A	233,636
4X6NM	21	89,080
OK8ACW	14	52,640
YO4DCF	7	23,184
SP9GKM	3.5	17,956

NOTE: Queries pertaining to the WPX Contest should be sent to N8BJQ via CQ Magazine, 76 N. Broadway, Hicksville, NY 11801.

(N8BJQ & CQ Magazine)

One day I will also send my log in...

4TH ANNUAL RTTY WORLD WIDE CONTEST RESULTS

SPONSORED BY RTTY JOURNAL AND 73 MAGAZINE 23 FEB. 1985

SINGLE OPERATOR - ALL BANDS

1.	Ed Bruns, W3EKT	184,140
2.	Roy Gould, KT1N	173,215
3.	Dima Slyusarenko, UT5RP	154,560
4.	Leo Small, K4AGC	122,800
5.	Peter Rodmell, G3ZRS	121,800
6.	J. Dudahl-Lasson, OZ1CRL	110,805
7.	Jan Palmquist, SM5FUG	91,455
8.	Bo Stjernberg, SM6ASD	90,000
9.	Jack Reed. WA7LNW	63,145
10.	Gastone Galeotti, VE3NUP	57,950
11.	Juerg Regli, HB9BIN	55,510
12.	Alle Lofgren, SM7AIA	51,015
13.	Robert Lewis, N4GXP/8	45,570
14.	Orbra Bliss, HC1BW	43,885
15.	Carl Steavenson, K6WZ	42,900
16.	K. L. Miller, VE7YB	40,975
17.	Bo Ohlsson, SM4CMG	35,245
18.	George Wesley, KB2VO	33,600
19.	Andy McLellan, VE1ASJ	32,250
20.	Douglas Heller, WD9FSD	32,130
21.	Olli Savolainen, OH2BDN	29,915
22.	R. Jacobson, K2YGM	27,795
23.	Etienne, Perozzo, ON7EP	25,625
24.	Vance Fauver, WB5HBR	24,150
25.	Leslie Harper, W8CFJ	21,780
26.	John Watson, W7MI	20,240
27.	Henrick Juul Olsen, DJØJU	19,500
28.	M. Navarro Ramos, XE2NNZ	16,720
29.	Wayne Wyatt, WB5QBV	16,060
30.	Lars Kjellgren, SM7LSU	15,345
31.	Chuck Prindle. W6JOX	14,350
32.	John North, EA7EYD	12,245
33.	Doug Nelson, K6HGF	11,655
34.	Mikio Kuwayama, JR2CFD	11,625
35.	Danny Centers, NF4F	11,160
36.	Eike Bartels, Y22UL	11,040
37.	Ludwig, Werner, DF5BX	10,920
38.	Ulrich Bettin, Y23FK/A	9,230
39.	John Graham, WD9EMW	4,900
40.	Steve Hanzlik, KA2CDJ/$	3,300
41.	Duane Snyder, K9PIG	2,565
42.	Max de Hensler, 4U1UN	2,550
43.	Mitsuo Morisawa, JA5TX	1,080

SINGLE OPERATOR 20 METERS

1.	Joe Wood, AJØX	163,095
2.	Shawn Keley, WB1AEL	52,260
3.	Sarkezi Arpad, YU7AM	37,400
4.	Jules Freundlich, W2JGR	32,400
5.	Jose Stragia, LU8ESU	27,090
6.	Ariosto De Souza, PT2BW	25,900
7.	Leslie Harper, W8CFJ	21,780
8.	Anthony Susen, W3AOH	20,295
9.	Hans Waterstraat, Y39TO	18,180
10.	James Sladek, WB4UBD	15,500
11.	Jurgen Bieber, DL9MBZ	12,470
12.	Nels Wasson, VE6CNV	9,145
13.	K. Tettelaar, VE7ATH	8,265
14.	Bill Snyder, WØLHS	7,930
15.	Dusil Miroslav, OK1AWC	7,820
16.	Scott Smith, KH6JKX	6,500
17.	Paul Clifford, WA2AXO	6,370
18.	Helio Senta, PY6ACP	6,240
19.	Gary Moles, ZL2AKI	6,120
19.	George Craiu, YO3RF	6,120
21.	Juan C. Montalvo, EA2AOV	5,925
22.	Kunihiko Fujii, JH1QDB	5,460
23.	Chris Le Tissier, GU4YMV	3,840
24.	Peter Hendrikx, PA3DBS	3,820
25.	Yasuyuki, Inoue, JR1AIB	3,780
26.	James Swan, VK2BQS	3,060
27.	Ross Merlin, WA2WDT	2,790
28.	Camilo Castillo, HP1AC	2,250
29.	Shunichi, M., JE1NWL	330
30.	Kang Tae Kyu, HL1QT	40

SINGLE OPERATOR - 15 METERS

1.	Hartmit, Bomberg, Y63ZI	4,590
2.	Manfred Behnke, Y33UD	300
3.	J. Kosch, Y63TI	40

MULTIPLE OPERATORS - ALL BANDS

1.	Elizabeth Ventresca, KA3GIK	144,500
2.	Earl Patterson, NG7P	109,740
3.	Leicester Polytechnk, G3SDC	74,200
4.	Bill Gosney, KE7C	57,000
5.	Gary Paquette, WA1VTZ	50,680
6.	University of Houston Bret Levit, WB5FND	50,160
7.	Radioklub Junior, OK3KII	47,320
8.	Zvazarmu Radioklub, OK3KGI	43,785
9.	Radioklub pri , OK3RJB	36,900
10.	Milton Coop, KD8KA	11.055
11.	Kenji Koseki, JA7YFB	1,890
12.	Tadashi Yoshimoto, JA6YDH	950

CHECK LOGS: Y26CO, W3BE, W3KV LU4EGE , EA5CVR and N6ELP.

See everyone next year hopefully with better conditions.

COMMENTS

Not vry gd condx and no body on 21 and 28 MHz. ON7EP.

Last yr I had been on RTTY only 4 weeks,hardly enough time to under stand the full scope of RTTY. This year was totally different..I not only understand the aspect but more than doubled last years sc score!! WA7LNW..

What a boom from W/VE on 14 MHz., that was an experience. Looking forward to 1986. OZ1CRL

I was shocked at the great number of of states on 80 M! I have never worked so many on that band! All in all a good contest,computers have really helped get people "on the air!" W3EKT.

Condx vry poor hr, not as good as last year, but had lots of fun. VE7ATH.

As usual I enjoyed RTTY contest.This year propagation was better,but maybe my antennas were better? Activity was very good,but I missed a good time in the morning for operating on 80M by local cause. Hope to be in next year with better antenna and without local causes. UT5RP.

Depending on where the operator was, conditions were good or poor on all or none of the bands. It was better conditions than expected and there were operations on all bands somewhere at some time. N6ELP...

HERE'S THE BEEF

C.W. Bug, NØ/FØOL

Here I am, back from a short holiday (just two months and no radio with me) and received a "greeting" from the boss of one company. He didn't like my comments about the problems with their product, a particular antenna. He also "promised" not to advertise in magazines that mention any problems with their products.

Where is the problem really? In mentioning the problem, or in the antenna design? What about poor hams spending nearly a thousand precious bucks for their hardware, only to find that after a few months of "singing" on the tower the antenna starts shaking the elements off and chewing up the boom?

The conscious manufacturer that cares about his reputation and long term business would welcome the comments and reports about the problem with his products. Nobody is perfect. There are problems that will only show up after a while. The good businessman would acknowledge the report and try to rectify the problem. Even the best engineer and designer can not foresee all the possible conditions that the product will be exposed to. If it comes to vibration of the antenna, the tower and supporting structures have quite a bit to "say." The whole system can resonate on some frequencies and then there is trouble. Vibration causes fatigue stress in the elements and parts, and sooner or later something gives.

This particular brand of antennas has a good reputation for mechanical design (they are very rugged). But specific 40 m design has exhibited tendency to vibrate. Perhaps there were not too many built in the past so the problem did not become pronounced.

The question that comes out of this is: Where do you stand? Where do you want me to stand? Should I only say that everything is nice and hunky-dory, even if it's not? Should we be standing up for the truth or should we all be politicians?

The media has a responsibility to report the truthful facts. With some exceptions many radio magazines paint the devil in nice bright colors, making an angel out of him even if it is $20 worth of parts sold as a wonder antenna tuner for $1000. Some equipment reviews make the piece of gear with bugs and design problems look like a winner. Sure, the manufacturer and advertiser loves it, but what about the poor sucker that has to buy it and also pay for the magazine that tells him how great it is, when it is not.

The reputable manufacturer or dealer cares about his reputation, the products he makes or sells. It is in his and our interest to find out about the problems and to rectify them. It is hard to build the reputation, trust and loyalty of customers, but it is very easy to lose them, especially in our radio family circles. The bad or good news travels with the speed of light and around the world.

The consumers have a right to demand the best products and quality they are paying for. Bless the competition, for it is a moving force that separates the boys from real men. If you have an idea or you can do better than what is there now, jump in and join the competition. It's just another contest.

Now back to contesting and DXing. There is a contest and DX bunch and there is a LID (List Interested DXers) bunch. The first bunch enjoys doing it on their own, fighting for their position on the DX ladder or in the contest, working on improvements of their antennas, equipment and all that goes with it. The "other" bunch consists mostly of lazy types. They don't want to tune around the band, they want to do it the "organized" way - fishing in the aquarium. We quite often hear the argument that the first bunch are the rich guys who can afford to buy the expensive equipment, etc.

Isn't it really because the first bunch are the types willing and wanting to work or fight for their goals, be it on ham bands, in private life or at their work? It would be interesting to do a survey and see what is the cross section of both groups, how it relates to their professional and life situation. I wouldn't be surprised if the second group was more of a lazy nature, comfortable with their TV set, beer bottle and a union card, demanding things and not willing to work for them.

I've talked to some ham friends who are involved in their own businesses or working for the Biggie corporations. One thing they found: a good contester, DXer or other brand of ham is usually also a nice person and a good worker or partner - they gladly hire him. I think there is a logical connection that comes down to basic human nature and personality. It is quite surprising sometimes to find how many remarkable people are hams. There is something about them. One has to be dedicated and hard working to prove himself in daily life or on the ham bands.

So, as Joan Rivers would say: "Grow up!" It can only help. Have fun, hunt on your own, work for it. Behave in a way that will make you to be proud of your call sign. Help to clean up the bands, observe regulations and gentlemen's agreements. We all will have more fun.

That brings us to another point. Shouldn't we be using our call signs in public too? Like having a callsign on the T-shirt, having it printed on our business cards and correspondence, or wearing a lapel pin with our call, or having it on the car license plate. How often when we travel, or are on a business trip, do we find by accident that the other person is a ham also? That changes the whole meeting. We are brothers and sisters in radio and all of a sudden we have a lot to talk about. It's just like meeting a lost cousin. By wearing our callsigns we will advertise our hobby to others and perhaps gain some new respect (if people knew that we are not just TVI). How many times the well known person, who has done so much for mankind, doesn't "advertise" that he/she is a ham? But people know that we have unsightly towers, interfere with TV, radios and garage door openers and they go and sue the hell out of us. They forget that, thanks to many hams, they are enjoying their TV, radio and other gadgets because many of those things were invented, pioneered or designed by hams. Let it be known!

So get your callsign out of the closet, wear it proud and be worthy of its tradition! 73, Clara

Chuck Clark, K4ZN

TRAFFIC

EMERGENCY

TRAINING

An emergency coordinator, speaking at a hamfest, outlines to the audience the importance of emergency communication as justification for our retaining our frequencies, the important aid we can give to people in time of need and the satisfaction that comes from having given that assistance. Finally, he talks about the great need for more people to become involved so that there will be adequate staffing when the need arises. "You don't have to have a station that can operate from emergency power. You don't need a hand-held or mobile rig either, although all of these are welcome and will help. But what we need most is people, operators who have licenses and know what to do in case of an emergency."

The emergency coordinator goes home after the hamfest with an impressive list of people who want to belong to the ARES. Impressive, that is, to anyone who has not actually taken part in volunteer emergency work. ARES, Red Cross, Salvation Army, Volunteer Fire Departments, all will tell you that it takes more than good intentions to develop an effective emergency service. It takes training.

The emergency coordinator may schedule a regular drill for the ARES members. He may remind those who signed up that they should be more regular in attending the drills. The answer often is, "I'm too busy to attend the drills, but if you need me in an emergency, I'll be available." In other words, I know all I need to know already. Don't be too sure of that. Even those with long experience in emergency operation don't know it all. They learn something from every emergency in which they participate, and often even from those they read about. Other emergency relief organizations such as the Red Cross, require their members to undergo regular training not only initially but throughout their time of service. Are Amateur Radio operations any different?

In a way they are, but not much different. It is true that active amateurs operate their stations on a regular, often daily basis. Therefore, they would be expected to be quite skilled as operators. But as training for emergency operation, much amateur activity leaves important areas neglected.

The most important communications that amateurs provide during an emergency are for third parties. In the first hour messages are critically urgent. They must reach their destinations immediately, and without error. If one is not familiar with traffic handling procedures, one could do much more harm than good in a situation like that.

Often emergency communications involving several stations at various critical locations working together form a net. If an operator is not familiar with net operations, the contribution will be negative instead of positive. When such a group is working together, communications go much more smoothly when the various operators have worked together regularly in the past. An outsider might soon be lost in trying to follow the action.

If you were the mayor, the chief of police, the Red Cross disaster chairman, or anyone in a similar position, would you have time to talk to someone you didn't know who offered to supply radio communications at a time when you are trying to get disaster relief to function? Would you have time to sit down and talk with every ham in town who individually wanted to be available if disaster should strike? Wouldn't you prefer to deal with someone who represents the amateurs in the area?

Also, if you were the emergency coordinator and the authorities asked you to put amateurs with hand-held rigs into emergency vehicles to provide for inter-agency communication or backup for the various agencies' with radio systems, would you want to put amateurs of unknown competence in such positions?

It all boils down to the need for preparedness, for advance preparation for emergencies. There is probably much more emergency gear around than there are hams who know how to use it effectively.

HOW TO PREPARE

It is true that regular amateur operation goes a long way to prepare one for emergency operation. In fact, even the study needed to qualify for an amateur license is an important part of our preparation. Any amateur activity helps us become proficient as operators. Most of us get plenty of experience maintaining our stations even if it's only packing the rig up and sending it back to the factory because we did something the book said not to do. Of course those of us who repair our own gear, or even more so, those who build their own, acquire much more valuable experience.

How we spend our operating time is significant. The best way is a mixture of various amateur activities. Casual rag chewing is valuable. It provides operating experience, enables us to meet other amateurs, and puts us in contact with people who can help us in whatever amateur activity we are pursuing. Traffic handling teaches accuracy, discipline and speed. DX makes us appreciate propagation peculiarities. VHF is where most of the emergency operation is to be found these days.

No less important is our contact with the people with whom we will be working during an emergency. On-the-air and eyeball contacts are important so that we know one another's capabilities, handicaps, operating style and even recognize one another's voices. Public service communication such as at races, parades and other large gatherings of people are excellent preparation for emergency operation. Also, participation in exhibition stations, particularly those that offer the public a free message-handling service "anywhere in the U.S. and Canada" is useful. It's good training for the operators who will be handling long-haul traffic during the emergency, whether real emergency traffic that has to go by Amateur Radio because commercial circuits are not functioning, or health

and welfare traffic for the people affected by the disaster.

Don't neglect CW. It is true that most emergency communication these days is a voice operation, but, it is also true that on many occasions CW has proved invaluable during an emergency. Here are a few reasons why:

Most emergency operation will be on phone, therefore the CW bands will be less cluttered. Wise emergency coordinators will give thought to routing outgoing traffic via CW for that reason.

CW has about a ten decibel advantage over a voice signal for two reasons: first, because it is digital. CW has only two states, on and off, where a voice signal includes many frequencies and many levels of amplitude. Second, CW occupies a much narrower bandwidth. Coherent CW stations can operate with a 10 hertz separation without mutual interference and enjoy an advantage of 20 decibels or more over a voice signal of the same power.

Unfortunately, not everybody can read CW. This is both an advantage and a disadvantage. It's an advantage because it discourages listening by people who might start unfounded rumors. Also, it gives some measure of privacy for the benefit of those who use our service. It's a disadvantage because many amateurs give up CW as soon as they pass the code test and it becomes hard to find someone who will operate the CW position.

CW is faster for record communications. In voice communication you have to spell out many words because of the similarity of English sounds. Was it write, right, wright or rite? When you send by CW it's clear from the start.

Also, CW requires simpler equipment, just some way to turn the carrier on and off. Morse code is adaptable to many other methods of signaling too, such as blinker light, auto horn and heliograph (reflected sunlight) that occasionally save lives in emergencies.

Above all, get in touch with your emergency coordinator, register your station in ARES and participate in the ARES activities as your time permits. Don't let anybody tell you that all this is not necessary because "we're only volunteers." Our county here in South Carolina is protected by 28 volunteer fire departments. I hope none of them offer as excuse for incompetence "we're only volunteers." Rather, I like the slogan posted in one of their fire stations, "Yes, we're volunteers, but we're professional too." In fact, that particular department is professional enough to have a better insurance rating than many paid departments. Amateur Radio should aim at nothing less. Our best is just good enough.

Send comments, suggestions, questions for this department to Chuck Clark, K4ZN, Route 3, Box 800 Moncks Corner, SC 29461.

CAMERON PIERCE, K6RU

1918 - 1985

Cam Pierce, K6RU, Director of The DX Foundation, died February 28, 1985.

Cam was a native of San Francisco, although he lived for many years in Southern California and Hawaii before returning to the Bay Area about one year ago. He graduated from Stanford University with a BS and later received an MS in radio engineering.

Cam worked on radar development at General Electric during the war years, then turned to broadcast radio and television. He was chief engineer for ABC-TV in Hollywood. Later he became president and chief executive officer of Ling Electronics in Anaheim, California. In Hawaii and again in Northern California, Cam worked as a manufacturers representative for Silicon Valley companies.

Cam is best known in amateur radio circles as a completely dedicated contester. He is surely "Father of the Multi-Multi Contest Station" and later, "Father of The Foundation's Beacon Net."

At Cam's legendary station in Fallbrook, California - between Los Angeles and San Diego - he put together one of the first major multi-multi operator contest stations complete with outstanding operators and unbelievable (for the time) antennas to match. His 40 meter antenna appeared on the cover of QST.

When Cam returned to the San Francisco area, he settled in Menlo Park, adjacent to Stanford. There he took the Stanford Radio Club under his wing and taught them how to win contests. He also worked with the Palo Alto Radio Club, planning and thinking about Field Day which he always expected to win, and usually did.

Cam became interested in The DX Foundation's Beacon Net about six years ago when we were trying to figure out how we were going to expand the net. The idea of building up about 15 beacons from nothing to fully automated beacon stations was not too happy a thought. Cam started thinking about the problem and, along with Dave Leeson, W6QHS, and Jack Curtis, K6KU, came up with the solution - to modify a Kenwood TS-130 and add the outboard controller box. This is the system in use today by all beacons.

Cam masterminded the construction of the first eight beacons - the ones you hear on the air now - the ones you have seen in pictures. He worked out material purchases, electronic fabrication, construction of chassis, days of testing, testing antennas - everything! It was frustrating and very time consuming, but he enjoyed it.

Conversations at his house or on the phone would be interrupted so Cam could check 4U1UN/B, the W6WX/B for precise time. Next he would listen to KH6O. Then of course, wait to see if the band was open to JA2IGY.

Cam's avid interest in contests - particularly DX contests - led him and a few members of the Northern California Contest Club to go to Niue in 1981 for the CQWW contest. Cam went back the next year alone for another stint at the contest controls of ZK2RU.

Cam lived on a small neighborhood lot - perhaps 65 feet wide. But on that lot he had four beam antennas of his own superior design on 10 through 40 meters, none more than 40 feet high, and an "L" antenna for 80/160. And inside a small operating room, he would set up four operating positions for his mini-multi-multi station. K6RU was always competitive. The day after a contest, Cam began tallying and graphing the results, getting ready to do a better job in that contest next year.

Cam was also editor of the Northern California Contest Club paper, The Jug; and for a while edited the Northern California DX Club paper, The DXer. Cam was always available to help or consult with DXers or contesters to help them produce a better score - even his rivals. A good contest operation was a thing to be admired, whether it was his own or the competition's. (NCDXF Newsletter)

FCC NEWS

BILL GRENFELL, W4GF

THE ARRL COMMENT ON FCC'S PR DOCKET 85-108 PROPOSAL OBJECTS TO THE PROPOSED BLANKET PROHIBITION OF TRANSMISSION OF THIRD PARTY TRAFFIC VIA STATIONS OPERATED UNDER AUTOMATIC CONTROL. ARRL stated that the "potential for abuse by unlicensed individuals in digital amateur radio system exists only at the point where the third-party traffic is originated and introduced into the amateur radio medium. ...It is therefore necessary for a control operator to monitor the transmission only when a message is being introduced into the system." ARRL also suggests that automatic control be permitted only for digital communications, provided that automatic shutdown would occur if a malfunction is detected, and devices are installed to assure compliance with the rules when a control operator is not present. (ARRL Letter, 07/04/85) The comment period on PR 85-105 ended on July 25, 1985.

IN AN ORDER ADOPTED JULY 2, 1985, FCC CONCLUDED ITS PRESENT LIMITATIONS ON THE LICENSE CLASS REQUIREMENTS FOR VOLUNTEER EXAMINERS PROVIDES "SUFFICIENT EXAMINERS AND EXAMINATION OPPORTUNITIES." While agreeing with petitioner Fred Maia (W5YI) that 47 U.S.C. s154(f)(4)(B) "is not a bar to Advanced operator administration of that element" (the 13 w.p.m. code test) to an applicant for a General license, the Commission stated that the General Class examinations comprises only about 12% of the volunteer examination workload. FCC concluded: "Therefore, we will continue to accept the voluntary services of only Amateur Extra operators for the administration of Element 1(B) for applicants for the General Class license at this time..." The current "...volunteer examination program above the Novice class (was) recently instituted in PR Docket No. 83-27."

MODIFICATION OF FCC'S PROPOSAL IN PR DOCKET 85-104, TO PERMIT THE USE OF TELEPHONY IN THE 7075-7100 kHz SEGMENT OF THE FORTY METER BAND BY FCC-LICENSED AMATEUR STATIONS LOCATED OUTSIDE THE CONTIGUOUS 48 STATES, IS PROPOSED BY THE ARRL. (See FCC News, 3 months back). "The League takes exception to the working of the proposal. By permitting the use of these frequencies outside the 48 states, amateurs on the high seas anywhere would be permitted to use them. This goes beyond Novoa's original request, and would significantly increase the use of the segment. The League suggests that the rule be modified to specify stations west of 30 degrees West Longitude or south of 20 degrees North Latitude. This restriction would better accomplish the objective of the original petition." David Novoa's corrected petition, AM-4872, proposed 19 degrees North latitude as the northern limit for use of telephony in the 7075-7100 kHz segment by FCC licensed amateur stations. The comment period for PR Docket 85-104 ended July 17, 1985.

ON JULY 5, 1985, FCC ADOPTED A NOTICE OF PROPOSED RULEMAKING TO ALLOW AUXILIARY OPERATION ON ALL AMATEUR FREQUENCIES, EXCEPT 431-433 AND 435-438 MHz. Presently, no Auxiliary operation is permitted below 220.5 MHz. nor in the two excepted sub-bands. Auxiliary operation is defined in Section 97.3(1) of the Amateur Rules as: "Radio communication for remotely controlling other amateur radio stations for automatically relaying the radio signals of other amateur radio stations, in a system of amateur radio stations." In support of its petition for the frequency expansion, The Quarter Century Wireless Association (QCWA) states that the technological state of the art has made restrictions on auxiliary operation unnecessary. According to the petitioner, allowing auxiliary links to be used on all amateur frequencies would provide the Amateur Radio Service with a variety of options such as in-band control, including the use of tertiary offsets; cross polarization of antennas; new cross-band modes of operation; and independent sideband for simultaneous control and repeater operation (referenced to the same suppressed carrier frequency). FCC stated: "The rationale for expanding the use of auxiliary links in the Amateur radio service is consistent with our proposal in PR Docket 85-105 to broaden the uses of automatic control". FCC made the usual provision for submission of comments; original on or before September 24 and reply comments on or before October 25, 1985. Comments should refer to PR Docket 85-215 and should be submitted to: The Secretary, FCC, Washington, D.C. 20554. All comments are given the same consideration, regardless of the number of copies submitted. "Formal" participants must file an original and five copies. "Participants who wish each Commissioner to have a personal copy of their comments should file an original and eleven copies."

"CALIFORNIA AMATEUR GETS RELIEF FORM CABLE TVI" is a headline in ARRL's 07/04/85 "Letter". He had 200 kHz wide, 20 to 60 db over S9 QRM from the cable. It involved both ingress and egress. The QRM level was unchanged by new cable. Further attempts for over six months got no co-operation from the cable company. He complained to FCC, Long Branch. The company said 50% of the QRM was corrected by a properly installed new splice connector. The company advised FCC that the remainder of the QRM problem would be corrected by a new drop cable installation program to be completed by mid-September. FCC found that two sites had leakage levels greater than the Rules limit. In response, the cable company said it could not duplicate the FCC's findings. The company later advised FCC it had corrected the leakage and that it had been caused by a child's tampering which had damaged the cable!

THE $2000 FINE ASSESSED TO JAMES BRANTLEY, K6KPS, FOR VIOLATION OF RULE 97.113. WHICH PROHIBITS BROADCASTING, HAD NOT BEEN PAID IN THE 30 DAY PERIOD PROVIDED FOR PAYMENT OR REPLY, WHICH ENDED ON JULY 12. Failure to pay or reply makes him liable for action by the Department of Justice. See last month's FCC NEWS for more details.

IN PR DOCKET 85-129, FCC HAS PROPOSED TO ALLOW "FIELD DISTURBANCE SENSORS" IN THE 1.6 - 10 MHz

SEGMENT OF THE SPECTRUM. Presently their use is restricted to discrete channels at 2, 4.5 and 8.2 MHz. The sensors are used by retail stores as anti-theft devices. The proposed use would be subject to the non-interference restrictions of Part 15 of FCC's rules. The ARRL has filed comments requesting that the devices be prohibited from operating in the 160, 80 and 40 meter amateur bands or their use be restricted to commercial, business or industrial environments. Sensor manufacturers feel that that reduces sensitivity of their devices derived from using a wide sweep of 1.6 - 10 MHz and will result in fewer false alarms. (ARRL Letter, 07/05/85)

ARRL HAS PUBLISHED A NEW, FOURTH EDITION OF "THE FCC RULE BOOK" AND IT WAS AVAILABLE FOR PURCHASE IN LATE JULY. It contains the most up-to-date version of FCC's Amateur Radio Service Rules including changes adopted on and before April 25, 1985.

ON JUNE 20, 1985 FCC ISSUED AN "ERRATUM" TO ITS NOTICE OF PROPOSED RULE MAKING, PR DOCKET 85-196. THE PROPOSED RULES WOULD: "...PERMIT VOLUNTEER-EXAMINER COORDINATORS (VEC'S) TO MAINTAIN POOLS OF QUESTIONS FOR AMATEUR OPERATOR EXAMINATIONS." The erratum advises that the "December 1, 1987" dates in paragraphs 8 and 9 should be changed to: "January 1, 1987".

A "LAOAD RADIO AND MICROWAVE COMMUNICATIONS CONSULTANTS" FIRM HAS PETITIONED THE FCC TO MOVE A DEVELOPMENT DIGITAL TELEMETRY SYSTEM FROM THE 216-220 MHz BAND TO 220-225 MHz. The ARRL has filed opposing comments and has suggested that the developmental system would be better suited to sharing two or more (174-216 MHz) TV channels. (W5YI Report, 07/15/85)

FOUR CALIFORNIANS WERE FINED FOR ENGAGING IN AND PERMITTING UNAUTHORIZED USE OF MODIFIED AMATEUR SSB EQUIPMENT ON 10,770 kHz between a sportfishing vessel offshore and a California private residence. The man and woman operating the equipment were fined $750 each as was the Captain of the vessel. The owner of the vessel "...was fined $2,000 for voyages from Cabo San Lucas to San Diego without an FCC licensed radio operator aboard." (W5YI Report, 07/15/85).

FCC SPONSORED A NATIONAL VOLUNTEER EXAMINER COORDINATOR'S CONFERENCE HELD ON AUGUST 9 AT THE COMMISSION'S GETTYSBURG, PA LICENSE PROCESSING FACILITY. The purpose was "...to devise ways of improving the overall ...volunteer testing system." "The FCC hopes that this will be the first in a series of meetings between all VECs, whether or not the FCC, itself, is involved." (Westlink Report)

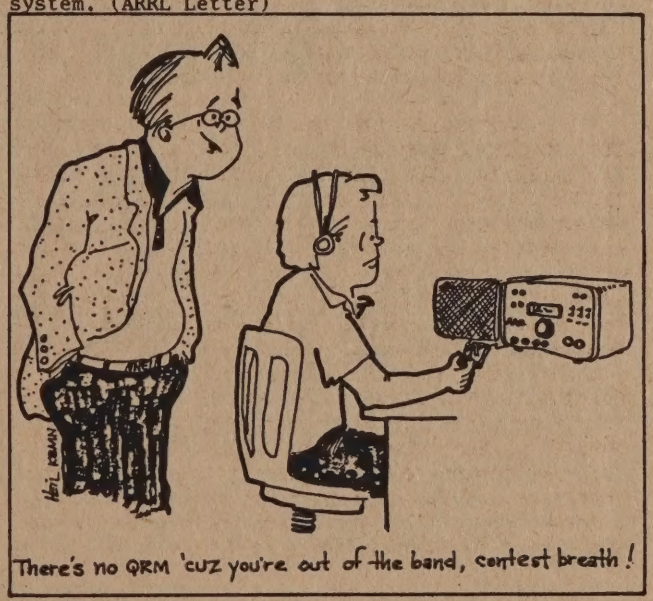
ON JULY 12, 1985, LAWRENCE KACZMARCZYK WAS ISSUED AN ORDER TO SHOW CAUSE WHY HIS ADVANCED CLASS OPERATOR LICENSE AND HIS STATION LICENSE, W3UQW, SHOULD NOT BE SUSPENDED AND REVOKED, FOR MALICIOUS INTERFERENCE TO OTHER AMATEURS OPERATING IN THE TWO METER BAND (Section 97.125). He is also charged with violation, on March 14 and 22, 1985, of Sections 97.113 (Broadcasting prohibited), 97.115 (Music prohibited), 97.84 (Station identification), and 97.123 (Unidentified communications).

AMATEUR OPERATOR LICENSE TOTALS, BY CLASS, AT THE END OF JUNE 1985 WERE: EXTRA, 37,214; ADVANCED, 97,383; GENERAL, 116, 595; TECHNICIAN, 81,688; NOVICE, 76,188; TOTAL, 409,068.

ON JULY 3, 1985, FCC ANNOUNCED CRIMINAL COMPLAINTS HAD BEEN FILED AGAINST THREE PERSONS ACCUSED OF MAKING ILLEGAL AMATEUR RADIO TRANSMISSIONS. These complaints resulted in the arrest of the three. Pending filing of formal charges, the complaints have been dismissed so that the cases can be reviewed and processed in a manner which permits presentation to a federal grand jury to seek indictments for violation of Federal law. Conviction could result in a sentence of up to one year in prison and a $10,000 fine for each offense. The FCC's Detroit office conducted the investigation and located the illegal operators in response to numerous complaints about deliberate interference being caused to Amateur Radio Communications (ARRL Letter)

TWO PHILADELPHIA CB OPERATORS WERE FINED $900 AND $750 IN JUNE FOR OVER-POWER OPERATION WHICH RESULTED IN COMPLAINTS OF INTERFERENCE TO NEIGHBORS TELEVISION RECEPTION. (ARRL LETTER)

FCC HAS "ISSUED" A FINE OF $1,000 TO A RIDGETOP, TN, RESIDENT FOR OPERATION IN AN UNLICENSED "OSCAR GROUP" WORKING NEAR 69930 kHz. He was located by FCC's Atlanta Office, with the help of the Commission's high frequency direction finding system. (ARRL Letter)



(from page 21)
sitting in a living room above a Chinese restaurant kitchen in Chinatown, San Francisco, U.S.A.

P.S. Vince has since moved. He used to have a 4 element tri-band quad on a neighbor's roof sandwiched between buildings. Looked like a pagoda roof.

P.P.S. Don followed Lee as president and served about 3 years. Our first two hard-working presidents did the hard work of masterminding the early policies and expansion. NCDXF has been riding on their visionary coattails ever since.

P.P.P.S. W6ISQ followed Don as president. It seems like about 87 years ago, but actually it is only about five. (NCDX Foundation Newsletter)

Dear Yuri,

Just finished reading Tom Morton's letter concerning a need for education of operators to the art of working DX. To a certain degree I must admit my article in the March issue of RADIOSPORTING was a lament of the poor operating practices exhibited in pursuit of DX. Also, I attempted to show the errors of poor judgment practiced by many when a highly sought after station comes on the air. These errors in judgment will produce failure to make the desired contact. Good judgment of the entire situation is part of the operating skill involved in success. It is far more important than a big rig. I sport many rare QSLs from a 65 W rig and a vertical 10 feet off the ground with 4 radials from my early years back on the east coast. The KW and beams now have made it easier but, they are not the whole story. I must agree that educating hams in operating skills is sorely needed. We have with us a new generation of hams. Many of them are coming into the ranks not initially as SWLers as you or I, but from CB radio, thus carrying into ham radio what was learned in CB operation. We constantly hear on the ham bands now such phrases as "come back," "go back," "3rds," stations making entire transmissions to another station without ever being initially acknowledged by the station being talked to, etc., all of which are throwbacks to C.B. operating practices.

What disturbs me however, is that a growing number of stations with old time W calls, among the KA and KB variety, are also adopting this style. Could it be that the old times are just giving into the new "modern techniques" just to stay with the newer and younger crowd? This is much like a 58 year old woman wearing a pony tail and a mini skirt just to stay young looking. If those experienced enough to set an example for the inexperienced behave inconsistently with their years of know-how, then the wrong type of osmosis will filter down to the newcomers.

So, this establishes a need for everyone to sit back and have a good long hard look at why pandemonium breaks loose when a rare one comes on. To simplify it - everyone feels he or she should get through first.

1. If it is rare - it is normal to have a large number of stations pursuing the DX.

2. It is abnormal to keep calling while the DX is in QSO with another station. The Golden Rule applies here: "Do unto others as you would have them do unto you." In other words - You have waited 30 years to QSO ZA2AA. After five hours in the pile-up he comes back to you. You hear him give your call and you're anxiously awaiting the report but, oh! no! Here comes WZ4LID repeating his call 3 times on top of the ZA while he's transmitting. If you did that to the WZ4LID he would probably put a pin through your coax.

3. Call the DX with your call once or twice only. If the DX doesn't come back to you right away, listen for a reasonable length of time to see who he does come back to. If 30 seconds has gone by and he answers no one, then call once again. On the DX end of the receiver is a large roar and signals are in his ear at all levels. A good operator will take what he hears off the top layer when he first starts operating. Once the super signals are out of the way he may alternate between loud ones and weak ones. The guy with the modest setup just might get through if he starts to call a second or two behind everyone else. The DX station might ignore an 59 signal on a turn to give a 57 or a 55 a crack. But neither the big or the small antenna is going to get through by calling non-stop continuously for 5 minutes.

On the DX end: the DX operator must repeat essential information often enough so everyone knows what he is doing, who he is and where to QSL. If he is operating split frequency he should mention that fact at least every five minutes. There are newcomers to the frequency all the time. They are not always lids if they call on the DX frequency. They are just poorly informed. Sign the call at least after every fifth QSO. Give QSL information every 15 minutes. If you keep everything a secret people are constantly going to interrupt the swift and smooth flow of operation with annoying time consuming questions. So, not giving essential information wastes a lot of time. Also do not encourage tail-ending.

The key words in successful DXing are: listening, skill, patience, courtesy, propagation, antenna orientation, timing, brevity and above all common sense.

Here is my contribution to the education of the new generation of DXers. Anyone who wants to add to it, is more than welcome.

Fred K. Klein, KS7T

Dear Yuri,

Thanks for the sample issues of Radiosporting, but my financial situation at the end of my mechanical engineering studies is not too good. I would be very much interested in subscribing as my interest is mostly DXing and contesting.

I have been a ham only for a few years. When I got my novice license (10 Watts CW, all bands) in 1979 I started to chase DX right away. I worked PP0MAC, KH6IJ, JT1KAA, HS1ABD with 10 W and a straight key. In 1981 I got my A class license and with the high sunspot numbers I worked 95% on the 10 meter band. I heard/ worked on 10 m: 280/231, in 1983 240/173, 1984 170/73. Heard but missed CE0AA, KX6DS, 5R8AL, YI1BGD. This makes my wanted list (253 worked) look strange. Almost half of the missing countries are in the Oceania, like A3, C2, 3D2, FO, KH8, T3, ZK. Managed to work a few rare ones on SSB 15 m band: AH9AB, BY1QH, BY8AA, XU1SS and on CW: BY8AA, CE0AA, DJ5CQ/SV/A, FR7AI/T, XU1SS, VU7WCY, ZL8AMO.

About nets: I like your view. Only once have I worked a new country on a net, KC6IN, and later I had a strange feeling: Was this DX? No, I really agree with you, on lists and nets you only fool yourself for the fun and increase the controllers ego!

We have a very active local EDR club, OZ9EDR. Our membership includes OZ3PO danish DX group president, OZ5IQ, OZ2GZ - owner of OZ1EME best 2 meter EME station in OZ, OZ7IS - well known VHF, UHF and SHF manager in Europe, OZ5DX - EDR representative in IARU.

I will be glad to help with info, articles and photos from Scandinavia.

73 and good DX, may the sunspots be with you!

Morten Skjold Frederiksen, OZ1FTE

Yuri,

keep up the good work! Fantastic magazine. It sure is nice to have something fresh to read. When I received the first couple of complimentary issues, I decided what the heck - I'll give it a try for a year. Well, here's my renewal. I'm sold.

Ron, WU4G

Dear Yuri,

Please renew my Subscription to Radiosporting and my membership for one more year.

Keep up the good work! I subscribe to a few other magazines and Radiosporting is the only one I can honestly say that I read from cover to cover. I will be looking forward with interest to the announcement of the IRSA contest.

I bought a TS-940S six weeks ago and so far the only problem that I've had was a hum on the power transformer (possibly a lamination). I sent the rig back to Vancouver and the transformer was replaced and up to this date, the rig has been performing perfectly. It sure is a nice improvement over my old IC-720A. I guess the next step would be to improve my antennas and put up monobanders. Hopefully I can save enough pennies by next summer.

73 and good luck on the CQ WW contest!

George Furtado, VE7EIK

Dear Yuri,

Thank you for the magazine and I will gladly serve on the IRSA Board of Directors. I will try to spread the news about contesting and Radiosporting here in VK. Contesting and other "foreign matters" are not very popular here. I will send you some new articles and photos, the old ones from my DXpeditions in 1972 are all gone. When the sunspots go up I am planning to go on more DXpeditions.

I am still active in the contests, but my location is very poor. The only antennas I can use here are the vertical and a long wire from the window, to fence, to a tree and back to the fence.

73 from Karol Nad, VK2BQQ, ex OK3UH

Dear Yuri,

I'm enjoying Radiosporting - not a contester except to look for the rare ones I still need for DXCC. Keep it relatively simple to bring in others who are not engineers and to keep a lot of us interested. Appreciated the reportings of W2PV antenna systems. Perhaps we could have more details on the antenna design etc. We too would like to see more advertisements.

Just recovering from heart attack and dreaming of a good location and better antennas.

Ian Sutherland, VE3HXX

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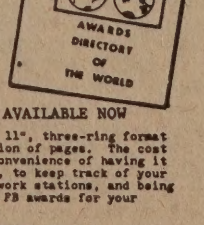

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Purpose and objectives:

1. To promote international friendship and goodwill through sportsmanship, radio contesting and DXing.

2. To improve the quality of amateur radio operators and operating through education and experience, by voicing the opinions of radio amateurs that are experienced and have contributed to the hobby.

3. To promote amateur radio contesting and other operating-related activities as a sport, and to provide the publicity and recognition that it deserves in the public media.

4. To publish timely articles in the monthly magazine "RADIOSPORTING" on various subjects of interest to Contesters, DXers, SWL, VHF, UHF and microwave enthusiasts, on RTTY, SSTV, computers in communications, fox hunting and anything of interest to the active ham striving for self-improvement. To feature technical articles on equipment design and modifications, antenna construction, radio-wave propagation, and commercial equipment reviews by qualified people.

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10. To coordinate and assist in the scheduling of international contests.

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16. IRSA will assist and sponsor Contests/DXpeditions, Trophies and other radio sporting and publicity events.

17. IRSA is a non profit organization, with all proceeds to be used to finance events and awards sponsored by IRSA and to cover expenses incured by Association.

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Advertising, productn.	Sonya Blanarovich
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